

## Chapter 15

# VEGAN Diet Prep Get Ready, Get Set, Go!

**N**ow you understand the basics and you are ready to begin *Nature's Detox*. If you have never cleansed before then you will spend at least one week eating the foods from this menu planner until you are ready to advance to Beginner Level Phase I Detox. If you have a chronic health condition, or you are not quite ready to jump into *Nature's Detox*, then you can eat from the Vegan Diet Prep for as long as you need to prepare yourself. It is also important to realize that those with chronic Yang dominant conditions (hypertension, diabetes, heart disease, gout) could be on this diet indefinitely as a means of prevention against further progression of the condition. A very high percentage of people begin seeing changes in their body on this diet alone.

TAKE A BEFORE PHOTO of yourself before you begin this Vegan Diet Prep so you can see how you change over the days and weeks to come.

DAILY JOURNAL: Get that daily journal ready! It will be your daily diet diary and record your food, your liquid, weight, pertinent vitals, eliminations, sleep, mood, and any symptoms. This will also serve as a diary to put your thoughts down that emerge from the unconscious mind.

Example: January 1, weight 200, BP 135/85, pulse 75, BM- one yesterday- harder, H<sub>2</sub>O = 70 oz

break: apple kale smoothie, lunch: sweet potato, veggie salad,  
dinner: veggie soup

sleep: slept super hard, didn't want to get out of bed so tired  
this morning still

symptoms: feeling a bit weaker today, intense cravings for the  
foods eaten by others

mood: not happy, feeling deprived, feeling like my whole day is  
thinking about food

thoughts: had a dream I was a child and remembered being told  
“no” often. Maybe I am using food to prove I can do what  
I want? Maybe my choice of unhealthy foods really has its  
roots as a childhood rebellion against the adults telling  
me “no”? Hmm.

SHOPPING LIST for Vegan Diet Prep: All foods listed under  
“What to ENCOURAGE and EMPHASIZE.” Read the snack ideas,  
condiments, and meal plans and get an idea of what you plan on  
preparing for this week. I would recommend making a copy of these  
“Encourage and Emphasize foods” and take it to the grocery store  
as a shopping list.

FOOD: The entire *Nature's Detox* program from start to finish is  
VEGAN. This means, no animals nor any products from animals, will  
be eaten. Below is a list of what should be emphasized and what  
should be eliminated through the entire cleanse. The proportion  
is 80% raw foods to 20 % cooked foods for the Vegan Diet Prep.  
Because your diet is much lower in fats and proteins- you may find  
yourself more hungry than usual. Instead of turning to the wrong  
foods, you may have to do as a cow would do and graze all day long!  
As long as that grazing falls within the permitted foods, you can eat  
between meals as you feel the need. This might be something like  
raw veggies or an organic apple, raw seeds or even just chewing

some natural xylitol gum, brushing your teeth, or drinking some lemon water or herbal tea can also satisfy a craving.

**WATER:** Sip your recommended minimum amount of fluid throughout the day in the form of pure water or herbal tea as recommended in the general guidelines (Chapter 11).

**SUPPLEMENTS: DISCONTINUE** all supplements- yes that is right- including your multivitamin, fish oil, and probiotics. It is highly unlikely to develop a vitamin, mineral or other nutrient deficiency during cleansing. Some nutrients like niacin can affect glucose and fat metabolism so stop them all unless directed otherwise by your physician. Also discontinue all non-necessary medications with the assistance of your physician. Do not discontinue prescribed medications unless advised by your physician to do so.

**ELIMINATION:** The plan is to have a minimum of 2-3 soft bowel movements daily. They should be easy to eliminate and feel completely evacuated. If your stool is too hard, strained, or too infrequent then increase water intake and add an herbal cathartic such as *Nature's Detox Intestinal Cleanse™* Part 2. If your stool is too soft, liquid, or too frequent (more than 5 times daily) then add in *Nature's Detox Intestinal Cleanse™* Part 3 and more fiber from ground flax, chia or psyllium seeds (intestinal cleanses found at [www.drandrewiverson.com](http://www.drandrewiverson.com)).

Urination should be frequent and the urine color should be light yellow (not clear). If it is any darker than light yellow then your water intake will need to be increased.

**IMPORTANT:** Exercise, running, and strenuous walking, yoga, and mini-trampoline are okay during this time especially if done outside with fresh air and sunshine. Rest is imperative. Nightly sleep no less than 8-9 hours, in a well ventilated room with an air purifier if possible.

## **What to ELIMINATE during VEGAN DIET PREP:**

**RESTAURANT FOOD:** fast food, take-out, home-delivery, and even sit-down restaurants.

**PREPARED FOOD:** food that is sold in a package of any type- even if it says “*Organic.*” Avoid if it is in a can, box, jar, or sold as ready-to-eat, pre-made, oven or microwavable foods.

**ANIMAL PRODUCTS:** beef, pork, chicken, turkey, eggs, fish, and shellfish. Eliminate all dairy products: milk, cream, cheese, yogurt, sour cream, butter, and ice cream. This includes organic dairy products.

**FATS and OILS:** hydrogenated oils, partially hydrogenated oils, Olestra™, vegetable oils like corn oil, soybean oil, canola oil, safflower oil, mayonnaise, margarine, and shortening.

**PROCESSED STARCHES** (including “gluten-free” versions): sugar (all forms), enriched flour, wheat flour, wheat bread, pasta, white rice, dry cereals, pancakes, waffles, biscuits, cakes, pastries, cookies, candy, French fries, and hash browns.

**CHEMICALS:** fructose, high fructose corn syrup, Nutrasweet™, Splenda™, aspartame, saccharin, sugar, corn syrup, artificial colors FD& C, artificial flavoring, sodium chloride (salt), MSG, monosodium glutamate, yeast extract, hydrolyzed protein, preservatives, sulfites, nitrites, caffeine, alcohol, nicotine and yes marijuana too 😊.

## **What to ENCOURAGE and EMPHASIZE during VEGAN DIET PREP**

**FLUIDS:** water, broths, non-caffeinated herbal tea, water with fresh lemon or lime juice, Rejuvelac (recipes Chapter 51). Take these

warm or hot if you are feeling too chilled. Consider herbal teas with ginger, cinnamon, nutmeg, licorice, or stevia for sugar cravings.

**VEGETABLES:** This is the list of items that will be considered vegetables. If any foods have (raw) written after that means that only the raw version is considered a vegetable and the cooked version is considered a starch. **Choose one or more of the veggies below per plate. The total amount of veggies per meal should be at least three times the weight of the starch. The goal for the day is about 80% raw foods to about 20% cooked for the average type person.** If you are more Yang emphasize more raw veggies and if you are more Yin emphasize more cooked veggies. You can eat as many of these as you wish if you are still hungry beyond the recommended serving sizes. Buy organic when possible.

artichoke	fennel	rutabaga (raw)
arugula	garlic	spinach
asparagus	ginger	sprouts(all varieties)
bamboo shoots	green beans	summer squash
beet greens	jicama	Swiss chard
bok choy	kale	tomato
broccoli	kelp	turmeric
Brussels sprouts	kohlrabi	turnip (raw)
cabbage	leek	turnip greens
cactus nopales	lettuce (all varieties)	water chestnuts
carrot (raw)	mustard greens	watercress
cauliflower	mushroom (all varieties)	zucchini
celery	okra	
cilantro	onion	
collard greens	parsley	
cucumber	peas (raw)	
daikon(raw)	pepper (all varieties)	
eggplant	radicchio	
endive	radish	
escarole		

**HEALTHY STARCHES: What to ENCOURAGE and EMPHASIZE during VEGAN DIET PREP. Only choose one starch per meal and add no more than the listed serving size. Buy organic when possible.**

Whole Grains= 1 cup cooked / meal

amaranth	corn grits	red rice
barley	kamut	rye
brown rice	millet	spelt
buckwheat	oatmeal	wheat berry
corn kernels	quinoa	wild rice

Roots (cooked)= serving size per meal are listed

beet 2 cups	rutabaga 2 cups
carrots 2 cups	sweet potato 1 cup
Jerusalem artichoke 1 cup	turnip 2 cups
parsnip 2 cups	yam 1 cup
potato 1 cup (baby size any variety)	yucca 1 cup

Squash (cooked) = 1 ½ cups / meal

acorn squash	butternut squash	pumpkin
all winter squash	delicata squash	spaghetti squash
banana squash	hubbard squash	sweet meat squash

Beans/Peas = 1 cup cooked / meal

adzuki beans	lima beans
black beans	mung beans
black-eyed peas	navy beans
fava beans	pinto beans
garbanzo beans	red beans
green peas	soy beans
great northern	split peas
kidney beans	white beans
lentils	

Fruits Cooked: serving size per meal

apple sauce 1 cup

bananas ½ cup

plantains 1 cup

**FRUIT: What to ENCOURAGE and EMPHASIZE during VEGAN DIET PREP.**

Fruits permitted are only those in season and grown locally at the time of the cleanse. Fruits that are frozen from local seasonal fruit are also permitted; canned fruit is not permitted. **Fruit is only eaten as a snack away from meals (one serving = 1 cup) or alone as a meal (1 cup) or in a smoothie (1 cup).** *Note: If you have a history of fungal, candida/yeast, urinary infections, dermatitis, chronic allergies, elevated blood sugar, or if you have an attraction to alcoholic beverages- I would advise to either avoid the fruit entirely or have just one serving in the afternoon daily. Buy organic when possible.*

apple

apricot

banana

blackberries

blueberries

boysenberries

cantaloupe

cherries

cranberries

gooseberries

grapefruit

grapes

guava

honeydew

kiwi

lemon

lime

mango

nectarine

orange

papaya

peach

pear

persimmon

pineapple

plum

pomegranate

raspberries

rhubarb

strawberries

tangerine

watermelon

**NUTS, SEEDS, OILS: What to ENCOURAGE and EMPHASIZE during VEGAN DIET PREP.**

Nuts or seeds are allowed as long as they are RAW and unsalted. They will need to be chewed very well or eaten in the form of raw nut or seed butter. If you have difficulty digesting nuts or seeds,

try soaking overnight and they will be much easier to chew and digest. Nuts and seeds can be over-eaten if you are not careful. **The permitted amount of fat is only one handful nuts and seeds twice daily as a snack between meals with or without a piece of fruit. You may also add ONE of the permitted oils below to each of your meals either in the form of oil, nut butter or avocado. The amounts are 1 teaspoon of oil per meal, 2 teaspoons of nut or seed butters per meal or ¼ whole avocado per meal.** If you are Yang Dominant this amount of fat is extremely limited or completely avoided for a period of time. If you are Yin Dominant or concerned about losing too much weight or you are very physically active these amounts can be increased up to three times depending on the individual. Buy organic when possible.

Raw Nuts Seeds/Butters: (one handful twice daily as snack, 2 tsps nut butter with meal)

almonds	flax seeds	psyllium seeds
brazil nuts	macadamia	pumpkin seeds
cashews	pecans	sesame seeds
chestnuts	peanuts	sunflower seeds
chia seeds	pine nuts	walnuts
coconut	pistachios	
filberts	poppy seeds	

Foods: (¼ cup per meal)

olives	homemade almond milk okay
avocados	homemade coconut milk okay

Extra Virgin Cold Pressed Oils: (1 tsp per meal)

avocado oil	extra virgin olive oil
black currant seed oil	flax oil
borage oil	grape seed oil
evening primrose oil	hemp oil
extra virgin coconut oil	palm oil

peanut oil  
sesame oil

walnut oil  
wheat germ oil

**SNACK IDEAS- VEGAN DIET PREP:** Instead of traditional snacks, any meal can be cut in half and eaten 2 hours later in place of a snack. Otherwise here are some allowed snack options between meals.

**Careful with snacking-** it can undermine your health goals if you snack too much on higher caloric food like nuts, seeds, olives, fruit, dips, and kefir.

- raw veggies: carrot sticks, celery sticks, raw broccoli, cauliflower, peppers, cucumber slices, turnips, rutabagas, jicama, etc. (*raw veggies alone or dipped in: bean dip, guacamole, hummus dip, or nut/seed butter*)
- one piece of fresh fruit (with raw nuts or nut butter optional)
- coconut or soy yogurt/kefir
- handful of raw nuts and seeds
- apple sauce with raw coconut yogurt/kefir
- olives (*tree ripened*)
- homemade fruit gelatin (see recipes Chapter 51)
- small smoothie
- dried seaweed
- popcorn plain or with olive oil sprayed on
- half vegetarian sandwich or veggie burrito

#### CONDIMENTS: VEGAN DIET PREP

**Condiments are only recommended dependent upon your own health conditions or body type.** *Nature's Diet Cookbook* has a whole section dedicated to dressings and sauces. Also there are some permitted sauces and dressings that can be found in the recipe section of this book.

natural sea salt or mined mineral salt (only if you are YIN DOMINANT)

salt substitute (potassium chloride= No-Salt™ or Nu-Salt™) (for YANG DOMINANT who need a salt flavor)

tamari soy sauce (only for YIN Dominant)

herb seasonings: *(all herbs and spices may be used as condiments)*

Mrs Dash, Spike, etc

nutritional yeast

cayenne pepper, fresh ground pepper and similar seasonings

powdered kelp, dulse, or other seaweed

Simply Organic dressing pack mixes

unfiltered raw apple cider vinegar

fresh lemon or lime juice

all oils and nut butters listed above- Avocado oil based mayonnaise and Vegenaïse okay

salsa, guacamole, hummus, bean dips

cilantro, basil, parsley olive oil pestos

organic yellow/Dijon mustard, organic ketchup *(read labels!)*

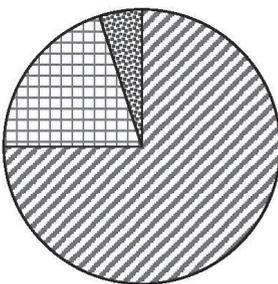
veggie broths

## MEAL PLANNER & MENU IDEAS:

What to ENCOURAGE and EMPHASIZE during VEGAN DIET PREP.

These types of vegan meals allow one to become gradually accustomed to more challenging dietary cleanses. You may mix or match any of the foods within these meal ideas as long as the proportions are being met. Each meal will have a serving of cooked complex carbohydrate (accounting for about 20-25% of the meal (with our without a little fat depending on your Yin or Yang type)) and vegetables (accounting for about 75% of the meal). **The goal is to consume approximately 80% of the total food for the day as raw and approximately 20% of the total food as cooked for the average type person.** If you are more Yang emphasize more raw veggies and if you are more Yin emphasize more cooked veggies. These meals are just ideas, you can also create your own by choosing one serving of starch and at least 3-5 cups of vegetables from the “Encourage and Emphasize” list for this Vegan Diet Prep phase.

Recipes for each food item can be found in *Nature’s Diet Cookbook* which is essential for being able to prepare the foods for this phase of the program. You can also convert any soup recipe in *Nature’s Diet Cookbook* to vegan by removing the animal protein. Some basic recipes of simple foods options are also found in Chapter 51 in the back of this book. *Remember there are no set breakfast, lunch, or dinner foods. Any meal can be eaten at any time of the day.*



General Guideline for the average “type” person:  
The plate should be approximately  
75% high fiber (green) vegetables (best raw)  
20% starch (whole grains, potato, squash, roots)  
and 5% or less protein/fat (nuts, seeds, avocado)

- Vegetables
- Starch
- Protein/Fat

– Vegan Diet Prep –

1 ½ cups winter squash  
1 cup sautéed green beans  
3-4 cups mixed green salad with 1  
Tbs standard vinaigrette

1 cup millet  
1 steamed artichoke dipped in olive oil  
3-4 cups fennel salad

1 cup brown rice or veggie rice pilaf  
1 cup steamed spinach/ kale/ collards  
with 1 tsp olive oil  
3-4 cups grated carrot salad

1 cup vegetable or squash risotto  
4-5 cups spinach salad with roasted  
pepper vinaigrette

4 Vegan cabbage rolls or  
4 Vegan sushi rolls or  
4 Vegan lettuce wraps

1 cup medium potato w/ ¼ avocado  
(and salsa)  
1 cup sautéed zucchini, onions,  
mushrooms  
3-4 cups Romaine salad with 1 Tbs  
standard vinaigrette

1 ½ cups spaghetti squash with  
marinara sauce  
1 cup steamed asparagus  
3-4 cups broccoli salad

2 cups vegetable soup  
4-5 cups spring green salad with  
2 Tbs pumpkin seeds and 1 Tbs  
dressing

1 ½ cups pea salad or corn salad  
1 cup roasted veggies  
3-4 cups kale salad

2 cups tomato gazpacho soup  
4-5 cups vegetarian Cobb salad

1 medium baked potato with 1-2 Tbs  
hummus  
4-5 cups raw veggie toppings  
Chopped lettuce/greens, tomato,  
sprouts, cucumber

1 cup black or red rice with 1 tsp  
olive oil  
4 cups stir fry veggies (any veggies  
from list above)

2 cups veggie pesto sauté  
3-4 cups arugula salad

1 ½ cups roasted carrots, parsnips  
1 cup roasted zucchini-summer squash  
3-4 cups spring green salad with ¼  
avocado

2 cups pea / corn salad (carrot salad)  
3-4 cups Belgian endive salad

1 cup tomato-pepper dal  
1 cup mashed cauliflower  
1 cup curried eggplant  
2 cups steamed spinach or greens

1 cup red bean veggie chili  
4-5 cups cabbage salad with ¼  
avocado

- 1 cup baby red potatoes with 1 Tbs tahini butter and salsa  
1 cup steamed veggies (any from list)  
3-4 cups garden salad with raw sunflower or sesame seeds
- 1 cup Spanish rice  
4 cups sautéed zucchini, summer squash, onion  
with roasted pepper sauce
- 1 cup sweet potato with 1 tsp coconut oil  
1 cup cruciferous winter veggie medley  
3-4 cups purple cabbage salad
- 1 cup baby roasted potatoes home fries  
with sunflower seed butter (and salsa)  
4-5 cups tossed Brussels sprout ribbons  
or sautéed green and red cabbage ribbons
- 2 cups vegetarian soup  
4-5 cups vegetarian Cobb salad
- 1 cup quinoa with ¼ avocado  
1 cup steamed asparagus  
3-4 cups raw pea pods tossed in vinaigrette
- 2 cups grains n greens n beans  
3-4 cups Swiss chard salad
- 1 ½ cups yams or sweet potato  
with 1 Tbs almond butter  
1 cup sautéed green beans  
3-4 cups mixed green salad
- 2 cups grilled veggie shish kebab  
3-4 cups Bibb salad
- 2 cups broccoli barley salad  
3-4 cups turnip salad
- 1 ½ cups roasted rutabagas, carrots, turnips  
2 cups sautéed chard, spinach, mushroom  
2-3 cups Arugula salad with grated radishes
- 1 cup black beans with salsa and ¼ avocado  
1 cup sautéed onions and bell peppers  
3-4 cups grated jicama – carrot salad
- 1 cup millet  
with 1 tsp olive oil or tahini and ¼ avocado  
4-5 cups tomato and cucumber salad
- 1 cup split pea soup  
4-5 cups leaf lettuce, sprouts, tomato salad  
1 handful pumpkin seeds
- 1 ½ cups black bean salad  
4-5 cups sprout salad with ripe tomato
- 1 cup corn cut off the cob  
1 cup grilled vegetables  
3-4 cups red cabbage coleslaw

– Vegan Diet Prep –

- 1 cup carrot-celery dal
- 2 cups gingered green beans
- 2 cups curried eggplant
  
- 2 cups steamed beets with apple cider vinegar
- 3-4 cups arugula-spinach salad with sprouts
- 1 handful sunflower or pumpkin seeds
  
- 1 cup tofu avocado pilaf
- 4-5 cups garden salad with creamy tofu avocado dressing
  
- 1 cup white beans or 2 cups white bean soup
- 1 cup sautéed onions, peppers, mushrooms
- 3-4 cups carrot jicama salad
  
- 1 ½ cups veggie polenta
- 4-5 cups spring green salad
  
- 1 cup sautéed parsnip roots
- 1 cup sautéed kale, collard greens
- 3-4 cups European salad greens
  
- 1 cup barley veggie salad
- 4-5 cups Karl's Breather's salad
  
- 1 cup corn cut from cob
- 2 cups grilled zucchini, yellow squash, peppers
- 2 cups sautéed green beans with onions
  
- 1 cup lentil soup
- 4 cups veggie stir fry: eggplant, squash, carrot, onion, mushroom
  
- 1 cup succulent polenta squash
- 1 cup steamed spinach
- 3-4 cups greens with tomatoes
  
- 1 cup quinoa w/ avocado tossed with 4-5 cups salad: lettuce, tomato, sprouts, cucumber
  
- 1 cup sweet potato with 1 Tbs almond butter
- 1 cup sautéed kale and mustard greens
- 3-4 cups fennel and endive salad
  
- 1 cup brown, black or red rice.
- 4 cups Asian stir fried veggies- Bok choy, cabbage, kale, bamboo shoots
- 1 tsp sesame seed oil
  
- 1 cup tabouli salad
- 1 cup ribbon beet salad
- 3-4 cups endive escarole salad
  
- 1 cup quinoa with 1 tsp olive oil or ¼ avocado
- 4-5 cups leafy green lettuce salad w veggies: cucumber, peas, tomato, sprouts, carrot
  
- 1 cup portabello mushrooms
- 1 cup beet salad
- 3-4 cups delicious greens
  
- 1 cup red rice or wild rice
- 2 cups asparagus steamed
- 2 cups eggplant and portabella mushroom w/ tomato marinara sauce

1 cup Asian style rice pilaf	½ cup basmati brown rice mixed with
4-5 cups Asian cabbage salad	½ cup cold peas and carrots (veggie rice pilaf)
1 cup steamed yellow potato with 2 Tbs guacamole and black bean dip	4-5 cups of shredded green leaf lettuce:
4-5 cups Romaine salad with olives	Toss all together in a mixed salad
1 cup acorn squash with 1 Tbs cashew butter	1 cup sweet potato baked fries
1 cup broccoli or cabbage steamed	4 cups baked veggies
3-4 cups daikon radish grated salad	1 ½ cups Mexican corn salad
1 cup lentil soup	1 cup chayote squash and pine nuts
4-5 cups spring green salad with fresh tomato	3-4 cups Latin cabbage salad
½ cup Austrian potato salad	2 cups barley veggie soup
½ cup steamed beets with apple cider vinegar	1 cup mashed cauliflower
½ cup homemade sauerkraut	3-4 cups spring green salad with olives
4-5 cups endive escarole salad	1 cup basmati brown rice with Mrs. Dash
½ cup standard pinto beans with tomato salsa	1 cup stir fry (any veggies from list above)
½ cup basmati rice with ¼ avocado	3-4 cups Brussels sprout radicchio salad
1 cup sautéed onions, mushrooms, peppers	1 cup quinoa with avocado
3-4 cups Fiesta Slaw	1 cup steamed vegetables (from list above)
1 cup pearled barley with 1 tsp olive oil	3-4 cups cabbage carrot salad
1 cup gingered green beans	1 cup black bean soup
3-4 cups Bibb lettuce salad with handful of walnuts	4-5 cups Karl's Breather's salad
1 cup standard polenta	1 cup millet or quinoa with olive oil and ¼ avocado
1 cup ratatouille	1 cup red cabbage ginger garlic stir fry
3-4 cups winter root slaw	3-4 cups tomato and cucumber salad
	1 ½ cups roasted potato
	1 cup roasted zucchini-summer squash
	3-4 cups romaine lettuce with tomato

– Vegan Diet Prep –

2 cups Kabocha or Red Kuri winter squash

4-5 cups Asian cabbage salad

2 cups split pea soup

3-4 cups carrot salad

1 ½ cup sautéed peas and carrots

3-4 cups broccoli salad

1 small baked potato

1 cup Brussels spouts

3-4 cups broccoli-cauliflower-carrot salad

2 cups carrot ginger soup

4-5 cups fennel and endive salad

1 cup millet with olive oil and Mrs. Dash

4-5 cups leafy green salad with sprouts

1 cup standard brown rice

2 cups Szechuan style eggplant

2 cups cauliflower curry

1 cup apple sauce

½ sweet potato with 1 Tbs almond butter

4 cups sautéed kale and collard ribbons

## *Chapter 16*

### **BEGINNER Level Phase 1 Nature's Detox and Prep for Intermediate Level Detox**

**N**ow that you have completed a week of the Vegan Diet Prep you are ready to start Beginner Level Phase I Detox by adding in raw meals or raw smoothies. Each level of cleansing (Beginner to Expert) will have a table like the one below indicating what foods to eat during each phase. **For the average individual the suggestion is to spend at least one day minimum in each phase (Phase 1a, 1b, 1c) before advancing to the next level.** Of course you can spend as many days as you wish on each phase until you are comfortable enough to advance. Never advance to the next phase if you are symptomatic. If you are symptomatic, return to the previous phase where you did not have symptoms and then slowly advance from there after the symptoms have cleared.

After spending some time at this Beginner Level Phase I Detox, some people may feel they have met their health goals or they are ready to end the cleanse. If you choose not to continue to the next Intermediate Level Phase 2 Detox then explicitly follow the instructions on “Breaking the Cleanse” in Chapter 12 to conclude the cleanse properly.

## BEGINNER LEVEL NATURE’S DETOX PHASE 1A-1C: For beginners or preparation for Intermediate Level Phase 2 Detox.

Phase 1a	Three meals with cooked foods as written in the menu plan below
Phase 1b	Two meals with cooked foods & 1 raw food meal or raw smoothie
Phase 1c	One meal with cooked foods & 2 raw food meals or raw smoothies

Phase 1b is the beginning of incorporating a meal a day that is all raw such as a raw salad, a raw fruit, a raw soup, or a raw smoothie (fiber/fruit blend with greens- see recipes in the smoothie Chapter 50). This will take us off the cooked foods gradually so that the body can adjust to the change in energy and any detoxification symptoms. By the end of this Beginner Level Phase 1c we will incorporate two raw meals per day which will prepare you for the all raw diet in the Intermediate Level Phase 2.

This BEGINNER LEVEL PHASE 1 DETOX is ideal to maintain for longer periods because it keeps your energy up so you can still function at work and home while undergoing a more sustained detox. It is also the perfect diet plan to begin incorporating any “organ specific cleanses” such as the *Nature’s Detox Herbal Cleanses™*; *Intestinal, Liver, and Urinary formulas* (see Chapter 36). This is especially helpful if you have a particular organ system that needs extra support and attention. Some people may choose to return to the Beginner Level (particularly Phase 1c) after they have completed *Nature’s Detox* and continue with the *Nature’s Detox Herbal Cleanses* for added and more profound detoxification.

Some people, particularly Yin Dominant body types, do not do well with the roughage in raw foods nor the coldness of raw foods. It causes irritability and digestive disturbances like gas, bloating, abdominal pain, and changes the stool quality. If this is how you typically respond to raw foods, then use a raw soup or smoothie to replace the raw food meal (Chapter 50). Another trick that seems to have helped my patients who have digestive upset after eating raw foods is to “raw cook” your veggies. Simply by allowing your fine cut veggies to “marinate” in a healthy salad dressing (lemon or apple

cider vinegar base) for an hour or longer will actually break down the rough fibers and make it tolerable for most people to digest.

If you are Yin Dominant this is where you may begin to notice a rapid weight loss that is not desirable. If this is the case, increase the cooked starches and the avocados, seeds and the allowed oils to prevent the weight loss from happening too rapidly. I would also recommend adding a sprinkle of sea salt or kelp powder to the food increasing the natural minerals and preventing the blood pressure and temperature from falling too low too early in the cleanse.

If you have **CONTRAINDICATIONS** or **RELATIVE CONTRAINDICATIONS** (see Chapter 7): you will start on each of the Beginner Level phases for a minimum of 2-3 days and observe how well you are responding before moving onto the Intermediate Level. If you are highly symptomatic (see Chapter 8) and you are not feeling well enough or able to move to the next level **DO NOT** proceed but rather take a step back to the Vegan Diet Prep or *Nature's Diet* until you are ready to restart this Beginner Level again from Phase Ia.

**SHOPPING LIST FOR BEGINNER LEVEL PHASE I DETOX: ALL foods listed under “What to ENCOURAGE and EMPHASIZE.”** Read the snack ideas, condiments, and meal plans and get an idea of what you plan on preparing for this week. I would recommend making a copy of these “Encourage and Emphasize foods” and take it to the grocery store as a shopping list.

**FOOD:** Continue the same VEGAN program as you have been practicing in the Vegan Diet Prep but **now we eliminate some of the foods that are considered more difficult to digest or in some people are pro-inflammatory** (*grains, beans, nightshades, high sulfur foods, cabbage family, nuts, sugars*). Below is a list of what should be emphasized and what should be eliminated through the entire rest of the cleanse. The proportion is 80% raw living foods and 20 % cooked foods for the Beginner Level Detox. Because your diet is much lower in fats and proteins, you may find yourself more

hungry than usual. Instead of turning to the wrong foods, you may have to do as a cow would do and graze all day long! As long as that grazing falls within the permitted foods you can eat between meals as you feel the need. This might be something like raw veggies or an organic apple, raw seeds or even just chewing some natural xylitol gum, brushing your teeth, or drinking some water or herbal tea can satisfy a craving.

**WATER:** Sip your recommended minimum amount of fluid throughout the day in the form of pure water or herbal tea as recommended in the general guidelines (Chapter 11). If you are becoming too chilled then drink your water warm or hot.

**SUPPLEMENTS:** Discontinue as in Vegan Diet Prep. Also discontinue all non-necessary medications with the assistance of your physician. Do not discontinue prescribed medications unless advised by your physician to do so.

**ELIMINATION:** The plan is to have a minimum of 2-3 soft bowel movements daily. They should be easy to eliminate and feel completely evacuated. If your stool is too hard, strained, or too infrequent then increase water intake and add an herbal cathartic such as *Nature’s Detox Intestinal Cleanse™ Part 2*. If your stool is too liquid or too frequent (more than 5 times daily) then add in *Nature’s Detox Intestinal Cleanse™ Part 3* and more fiber from ground flax, chia or psyllium seeds (intestinal cleanses found at [www.drandrewiverson.com](http://www.drandrewiverson.com)).

This Beginner Level Detox is a great time to utilize castor oil packs, enemas, and colonics (see Chapter 40).

Urination should be frequent and the urine color should be light yellow (not clear). If it is any darker than light yellow then your water intake will need to be increased.

**IMPORTANT:** Gentle walking and stretching, mini-trampoline rebounders are helpful especially when done outside for fresh air and sun bathing. Rest is imperative. Nightly sleep no less than 8-10 hours, in a well ventilated room with an air purifier if possible. Mental Rest: refrain from emotionally stimulating movies, sport games, intensive reading, writing, or calculating. Prayer, meditation, contemplation encouraged

**DIARY:** Continue your diary recording everything you are eating, drinking and your weight, vitals, sleep, mood, any symptoms, and any thoughts.

### **What to ELIMINATE during BEGINNER LEVEL PHASE I DETOX:**

All foods eliminated in the Vegan Diet Prep....AND:

**GRAINS** and everything made from grains (wheat, corn, oats, barley, quinoa, rice, spelt, kamut, rye) whole grain breads, crackers, tortilla chips and grain milks (rice milk, oat milk)

**SOY** products including soy sauces

**BEANS** (except adzuki and mung beans, green peas, lentils, and green beans are okay)

**NIGHTSHADES:** peppers, eggplant, potatoes (except tomatoes are okay)

**HIGH SULFUR FOODS:** irritate the gut: garlic, onions, radish, leeks or similar pungent veggies

**CABBAGE FAMILY-** broccoli, cabbage, cauliflower, Brussels sprouts, kohlrabi, turnips, rutabagas (arugula, watercress, kale, collard and turnip greens or similar leafy greens are okay)

– Beginner Level Phase 1 Nature’s Detox and Prep for Intermediate Level Detox –

PEANUTS, NUTS, NUT BUTTERS (seeds are okay and homemade nut milks okay)

NON-LOCAL FRUITS, NON-SEASONAL FRUITS

SUGAR OF ALL TYPES even dehydrated cane juice, honey, maple syrup, fructose, agave,

CONDIMENTS: most types- especially strong spices; black pepper, cayenne pepper (permitted condiments listed in each level: fresh lemon juice, herb seasonings, powdered kelp are okay)

DRINKS all types (except water with fresh lemon or lime, and herbal tea are okay)

**What to ENCOURAGE and EMPHASIZE  
during BEGINNER  
LEVEL PHASE I DETOX:**

FLUIDS: water, broths, non-caffeinated herbal tea, water with fresh lemon or lime juice, Rejuvelac (Chapter 51). Take these warm or hot if you are feeling too chilled. Consider herbal teas with ginger, cinnamon, nutmeg, licorice, or stevia for sugar cravings.

VEGETABLES: This is the list of foods that will be considered vegetables. You’ll notice that veggies from the cabbage/mustard, pepper, onion and radish families have been removed. If any foods have (raw) written after that means that only the raw version is considered a vegetable and the cooked version is considered a starch. Choose one or more of the veggies below per plate. The total amount of raw or cooked veggies should be at least 3 times the weight of the starch (as the pie graph illustrated in Vegan Diet Prep). The goal for the day is about 80% raw foods to about 20% cooked for the average type person. If you are more Yang Dominant emphasize more raw veggies and if you are more Yin Dominant emphasize more cooked veggies. You can eat as many of these as

you wish if you are still hungry beyond the recommended serving sizes. Buy organic when possible.

artichoke	escarole	peas (raw)
arugula	fennel	radicchio
asparagus	ginger	spinach
bamboo shoots	green beans	sprouts (all varieties)
beet greens	jicama	summer squash
cactus nopales	kale	Swiss chard
carrot (raw)	kelp	tomato
celery	lettuce (all varieties)	turmeric
cilantro	mushroom	(all turnip greens
collard greens	varieties)	water chestnuts
cucumber	okra	watercress
endive	parsley	zucchini

**HEALTHY STARCHES: What to ENCOURAGE and EMPHASIZE during BEGINNER LEVEL PHASE I DETOX. Only choose one starch per meal and add no more than the listed serving size.** Buy organic when possible.

Roots (cooked) = serving size per meal are listed

beet 2 cups	sweet potato 1 cup
carrots 2 cups	yam 1 cup
Jerusalem artichoke 1 cup	yucca 1 cup
parsnip 2 cups	

Squash (cooked) 1 ½ cups / meal

acorn squash	hubbard squash
all winter squash	pumpkin
banana squash	spaghetti squash
butternut squash	sweet meat squash
delicata squash	

Beans/Peas 1 cup cooked / meal

adzuki beans

mung beans

green peas

split peas (yellow and green)

lentils

Fruits cooked: serving size listed

apple sauce 1 cup

bananas cooked ½ cup

plantains 1 cup

FRUIT: What to ENCOURAGE and EMPHASIZE during BEGINNER LEVEL PHASE I DETOX.

Fruits permitted are only those in season and grown locally at the time of the cleanse. Fruits that are frozen from local seasonal fruit are also permitted; canned fruit is not permitted. **Fruit is only eaten as a snack away from meals (one serving = 1 cup) or alone as a meal (1 cup) or in a smoothie (1 cup).** *Note: If you have a history of fungal, candida/yeast, urinary infections, dermatitis, chronic allergies, elevated blood sugar, or if you have an attraction to alcoholic beverages- I would advise to either avoid the fruit entirely or have just one serving in the afternoon daily. Buy organic when possible.*

apple

guava

pineapple

apricot

honeydew

plum

banana

kiwi

pomegranate

blackberries

lemon

raspberries

blueberries

lime

rhubarb

boysenberries

mango

strawberries

cantaloupe

nectarine

tangerine

cherries

orange

watermelon

cranberries

papaya

gooseberries

peach

grapefruit

pear

grapes

persimmon

**SEEDS, OILS:** What to ENCOURAGE and EMPHASIZE during BEGINNER LEVEL PHASE I DETOX. Seeds are still permitted as long as they are raw and chewed very well or in the form of raw seed butter. If you have difficulty digesting seeds, try soaking them overnight and they will be much easier to chew and digest. Seeds can be over-eaten if you are not careful. **The permitted amount of fat is only one handful seeds twice daily as a snack between meals with or without a piece of fruit. You may add ONE of the permitted oils below to your raw food meal or smoothie in the form of oil, seed butter or avocado. The amounts are 1 teaspoon of oil per meal, 2 teaspoons of seed butters per meal or ¼ whole avocado per meal.**

If you are Yang Dominant this amount of fat is extremely limited or completely avoided for a period of time. If you are Yin Dominant or concerned about losing too much weight or you are very active these amounts can be increased up to three times depending on the individual. Buy organic when possible.

Raw Seeds: (one handful twice daily as snack, 2 tsps seed butter with meal)

chia seeds

psyllium seeds

flax seeds

pumpkin seeds

pine nuts

sesame seeds

poppy seeds

sunflower seeds

**Foods: (¼ cup per meal)**

avocados

homemade almond milk okay

homemade coconut milk okay

**Extra Virgin Cold Pressed Oils: (1 tsp per meal)**

avocado oil

evening primrose oil

black currant seed oil

extra virgin coconut oil

borage oil

extra virgin olive oil

flax oil

grape seed oil

hemp oil

palm oil

sesame oil

walnut oil

wheat germ oil

**SNACK IDEAS: BEGINNER LEVEL PHASE I DETOX:** Instead of traditional snacks, any meal can be cut in half and eaten 2 hours later in place of a snack. Otherwise here are some allowed snack options between meals. Careful with snacking-it can undermine your health goals if you snack too much on higher caloric foods like seeds, fruit, and dips.

- raw veggies: carrot sticks, celery sticks, cucumber slices, jicama, - any veggie on list
- homemade dips from mung/adzuki beans, lentils, guacamole, seed butter, pesto
- one piece of fresh fruit (with raw seeds or seed butter)
- handful of raw seeds
- homemade fruit gelatin (see recipes Chapter 51)
- small smoothie
- dried seaweed

## CONDIMENTS: BEGINNER LEVEL PHASE I DETOX

All condiments are dependent upon your own health conditions. *Nature's Diet Cookbook* has a whole section dedicated to dressings and sauces. Also there are some permitted sauces and dressings that can be found in the recipe section of this book.

natural sea salt or mined mineral salt (only if you are YIN DOMINANT)

salt substitute (potassium chloride= No-Salt™ or Nu-Salt™) (for YANG DOMINANT if desired)

herb seasonings: (*all herbs and non-pungent spices may be used as condiments*)

nutritional yeast flakes  
unfiltered raw apple cider vinegar  
fresh lemon or lime juice  
all oils and seed butters listed above  
guacamole, lentil/mung bean dips  
cilantro, basil, parsley olive oil pestos  
veggie broths  
Dijon or powdered yellow mustard if tolerated  
Mrs Dash, Spike, (these have onions, garlic, black pepper and may not be tolerated well- use caution)  
powdered kelp, dulse, or other seaweed  
Simply Organic dressing mixes (these can have pungent spices and may not be tolerated well)

#### MEAL PLANNER & MENU IDEAS:

What to ENCOURAGE and EMPHASIZE during BEGINNER LEVEL PHASE I DETOX.

This diet is considered clean in that it is free of most foods that cause low grade inflammatory reactions. This is the next step in preparing you for more challenging dietary detoxification. You may mix or match any of the foods within these meal ideas as long as the proportions are being met. Each standard meal below will have a serving of cooked complex carbohydrate (accounting for about 25% of the meal) and a vegetable cooked and/or raw (accounting for about 75% of the meal) (see pie graph in Vegan Diet Prep). These meals are just ideas, you can also create your own meals by choosing one serving of starch and at least 3-5 cups of vegetables from the “Encourage and Emphasize” list for this phase. The permitted condiments are also listed for this phase.

FOR RAW MEALS: Simply remove the cooked menu item and replace each cup of the cooked food for an additional cup of the raw. Alternately you may choose to blend a smoothie from one of

the raw smoothie recipes in the smoothies chapter or just have a meal of raw fruit (1 cup).

Recipes for each food item below can be found in *Nature’s Diet Cookbook* which is essential for being able to prepare the foods for this phase of the program. You can also convert any recipe in the cookbook to vegan by removing the animal protein if you wish. This is particularly helpful for soups and to add variety into the diet. Recipes to these simple foods can be found in Chapter 51 of this book. *Remember there are no set breakfast, lunch, or dinner foods. Any meal can be eaten at any time of the day.*

1 ½ cups winter squash  
1 cup sautéed green beans  
3-4 cups green salad  
¼ avocado

1 cup medium sweet potato  
2 tsps seed butter  
1 cup sautéed zucchini  
3-4 cups Romaine salad

1 cup lentils  
1 steamed artichoke with oil dip  
3-4 cups fennel salad

2 cups vegetable soup  
4-5 cups spring green salad  
1 Tbs vinaigrette dressing

1 ½ cups cooked peas and carrots  
4-5 cups simple kale salad

1 ½ cups acorn squash  
4 cups veggie stir fry

1 cup mung bean dal or soup  
4-5 cups leaf lettuce, sprouts, tomato, salad  
¼ avocado

1 ½ cups roasted carrots, parsnips  
1 cup roasted zucchini-summer squash  
3-4 cups spring green salad with avocado

1 cup yellow split peas  
1 cup steamed kale  
3-4 cups grated carrot salad

1 cup red yam  
1 cup steamed veggies  
3-4 cups garden salad

2 cups steamed beets with 1 Tbs vinaigrette	1 cup cooked yucca with olive oil or avocado
2 cups spinach salad	4-5 cups leafy green lettuce salad w veggies:
2 cups grated jicama – carrot salad	Cucumber, peas, tomato, sprouts, carrot
2 cup parsnips with avocado	1 cup acorn squash
1 cup steamed asparagus	1 cup steamed beets with lemon juice
3-4 cups pea pod salad	3-4 cups Romaine lettuce tomato salad
1 cup red lentil dal or soup	1 cup yellow split pea soup
4-5 cups tomato and cucumber salad	1 cup string green beans
1 Tbs vinaigrette dressing	3-4 cups spinach salad with grated carrots and beet
1 cup yams or sweet potatoes	1 cup mung bean dip
2 tsps seed butter	2 cups raw asparagus
1 cup steamed green beans	3 cups cucumber/tomato/avocado salad
3-4 cups spinach salad	2 cups squash soup
1 cup steamed beets with apple cider vinegar	4-5 cups leafy green salad with sprouts
1 cup homemade sauerkraut	2 Tbs sunflower seeds
4 cups bitter greens salad	1 ½ cups winter squash
2 cups steamed beets and carrots	1 cup sautéed green beans
3-4 cups spinach salad with sprouts	3-4 cups mixed green salad with 1 Tbs standard vinaigrette
1 ½ cups sautéed parsnip roots	1 cup delicata squash
1 ½ cups sautéed kale greens	1 steamed artichoke dipped in olive oil
3 cups European salad greens	3-4 cups fennel salad
1 cup steamed Jerusalem artichokes	2 cups split pea soup
2 cups grilled vegetables	2 cups carrot salad
2 cups sautéed green beans	2 cups European salad blend
1 cup sweet potato	
1 cup sautéed kale and collard greens	
3-4 cups fennel and endive salad	

- 1 cup steamed beets with apple vinegar  
1 cup steamed spinach/ kale with 1 tsp olive oil  
3-4 cups grated carrot salad
- 1 cup yellow split pea soup  
1 cup sautéed zucchini, fennel, mushrooms  
3-4 cups Romaine salad with 1 Tbs standard vinaigrette
- 1 ½ cups spaghetti squash with marinara sauce  
1 cup steamed asparagus  
3-4 cups spinach salad
- 2 cups vegetable soup or squash soup  
4-5 cups spring green salad with 2 Tbs pumpkin seeds and 1 Tbs lemon juice/oil
- 1 ½ cups pea salad  
1 cup roasted veggies  
3-4 cups kale salad
- 2 cups carrot ginger soup  
4 cups fennel and endive salad
- 1 ½ cups yam or winter squash with 1 Tbs tahini butter  
1 cup sautéed green beans  
3-4 cups mixed green salad
- 2 cups veggie pesto sauté  
3-4 cups arugula salad
- 1 ½ cups roasted roots carrots, parsnips  
2 cups roasted zucchini-summer squash  
2 cups spring green salad with ¼ avocado
- 2 cups pea / carrot salad  
4 cups Belgian endive salad
- 1 cup mung bean or lentil dal  
1 cup steamed veggies (any from list)  
3-4 cups garden salad w/ 2 Tbs raw seeds
- 1 cup roasted yucca with 1 tsp coconut oil  
2 cups steamed spinach or greens  
2 cups sautéed zucchini, summer squash
- 1 cup roasted yam home fries  
1 cup steamed asparagus  
3-4 cups raw pea pods tossed in vinaigrette
- 2 cups pumpkin soup  
1 cup steamed vegetables (any from list)  
3-4 cups endive radicchio salad
- 1 cup sweet meat squash w/ 1 tsp coconut oil  
2 cups grilled veggie shish kebab  
3 cups Bibb salad
- 1 ½ cups roasted parsnips, carrots, beets  
1 cup sautéed chard, spinach, mushroom  
3-4 cups Arugula salad with vinaigrette

1 cup steamed yucca  
with 1 tsp olive oil or tahini and ¼  
avocado

2 cups tomato and cucumber salad

2 cups grated jicama – carrot salad

1 cup split pea soup

4-5 cups leaf lettuce, sprouts, tomato  
salad

1 handful pumpkin seeds

1 cup carrot-celery dal

1 cup gingered green beans

3-4 cups sprout salad with ripe  
tomato

1 ½ cups spaghetti squash with  
marinara sauce

1 cup grilled vegetables (any from list)

3 cups garden salad with vinaigrette

2 cups sautéed parsnip roots

2 cups sautéed kale greens

2-3 cups European salad greens

1 cup portabella mushroom

w/ tomato marinara sauce

1 cup asparagus steamed

3-4 cups raw greens with pesto  
dressing

1 cup sweet meat squash puree

1 cup sautéed green beans with  
onions

3-4 cups spring green salad w 1 Tbs  
vinaigrette

1 cup red lentil soup

4 cups veggie stir fry:  
carrot, zucchini, yellow squash,  
mushrooms

1 cup baked yucca w/ ¼ avocado  
tossed with

4 cups salad: lettuce, tomato, sprouts,  
cucumber

1 cup sweet potato with 2 tsps tahini  
butter

2 cups sautéed kale and mustard  
greens

3 cups fennel and endive salad

1 cup steamed carrots and peas

1 cup ribbon beet salad

3-4 cups endive escarole salad

1 cup portabello mushrooms

1 cup beet salad

2-3 cups delicious greens

2 cups steamed beets with apple cider  
vinegar

4-5 cups arugula-spinach salad with  
sprouts

1 handful sunflower or pumpkin seeds

1 cup steamed sweet potato  
with 2 tsps sunflower seed butter

1 cup steamed spinach

3-4 cups Romaine salad with olives

– Beginner Level Phase 1 Nature’s Detox and Prep for Intermediate Level Detox –

1 cup lentil or split pea soup	1 cup sweet potato baked fries
4-5 cups spring green salad with fresh tomato	4 cups baked veggies
1 Tbs pesto vinaigrette	2 cups veggie soup
1 cup steamed beets with apple cider vinegar	1 cup chayote squash and pine nuts
1 cup homemade sauerkraut	3-4 cups spring green salad with oil
4 cups endive escarole salad	1 ½ cups roasted yam with coconut oil
1 cup acorn squash with 2 tsps tahini butter	1 cup roasted zucchini-summer squash
2 cups gingered green beans	3-4 cups romaine lettuce with tomato
3 cups Bibb lettuce salad with handful of walnuts	1 cup Kabocha or Red Kuri winter squash
1 cup spaghetti squash	2 cups stir fry (any veggies from list above)
2 cups ratatouille (only allowed veggies)	3 cups tomato and cucumber salad
2 cups carrot jicama salad	1 cup apple sauce
2 cups steamed peas and carrots (chilled)	½ sweet potato w/ 2 tsps sunflower butter
4 cups of shredded green leaf lettuce:	4 cups sautéed kale ribbons
Toss all together in a mixed salad	

## Chapter 17

### **INTERMEDIATE Level Phase 2 Nature's Detox and Prep for Advanced Level Detox**

**N**ow you are familiar with the dietary changes so we will take it to the next level by increasing raw foods and introducing the concept of meal replacements. Cutting out one meal a day and replacing it with a liquid meal is the best way to adjust the body to a lower calorie diet and slowly introduce fasting to the body. Liquid meals take about 15 minutes to assimilate while raw foods can take hours depending on how well chewed they are.

*If cleansing is a new subject to you then please don't start here, you will need to do your prep work in the Vegan Diet Prep & Beginner Level Detox first. Also, for many of you this will be the level where you decide to complete and break the fast. Even if you just do the Beginner Level Detox and one or more days of this Intermediate level Detox you have still done yourself a world of benefit. This is often the phase when symptoms may start to creep in so do not feel pressed to move up to the Advanced Level if you are overly symptomatic (see Chapter 8). Of course, you can spend as many days as you wish on each phase (2a, 2b, 2c), however never advance phases if you are symptomatic. If you are feeling strong symptoms you must go back to a previous phase or even back to the Beginner Level Phases 1c, 1b or 1a until you are feeling better.*

If you feel you have reached your health goals at this Intermediate

Level Phase 2 Detox and you wish to go no further then break the cleanse as instructed in Chapter 12 by reversing the phases: 2c, 2b, 2a, 1c, 1b, back to 1a or Vegan Diet Prep or *Nature’s Diet*. **If you did well on the beginner levels or you are familiar with cleansing then you will spend at least one day in each of the Intermediate phases 2a, 2b, and 2c before moving on to the Advanced Level Phase 3 Detox.**

INTERMEDIATE LEVEL NATURE’S DETOX PHASE 2A-2C: For intermediates or preparation for Advanced Level Phase 3 Detox.

Phase 2a	Three raw food meals or raw smoothies- no cooked foods
Phase 2b	Two raw food meals or raw smoothie & 1 veggie juice
Phase 2c	One raw food meal or raw smoothie & 2 veggie juices

As some people enter this phase they start to lose a desire for food. You may find this to be true or you may experience just the opposite and feel hungry all day. *If you are feeling particularly hungry-then eat as much of the raw foods as you desire—but ONLY during the time allowed for eating.* For instance, if you are hungry on Phase 2c then you can eat as much as you wish during the hours you have allotted for a meal and during the other two meal periods it is only allowable to drink your meal in the form of juice. This allows the digestive system and the body as a whole to “rest” from digesting and begin the deeper cleansing.

This INTERMEDIATE LEVEL PHASE 2 DETOX is another excellent level to incorporate “organ specific cleanses” such as the *Nature’s Detox Herbal Cleanses™ for the intestinal, liver and urinary systems* (see Chapter 36). If you have a particular organ system that needs extra attention with herbal formula then this would be a great level to take the botanical medicine. Some people may choose to return to this level (particularly phase 2a and 2b) after they have done *Nature’s Detox* and focus on cleansing a specific organ system.

It is not common, but some people may start to feel REFLUX or HEARTBURN at this point in the fast. If this is the case, then

you will want to change the juices to contain less carrots or beets which can cause this in some people. You may also want to make your juices more simple with less ingredients. The other possibility is the juices are too cold- I recommend warming them up to body temperature by putting the juice in a mug and heating the mug in a pot of hot water until a desired temperature is reached. I will also recommend adding fresh squeezed lemon or lime juice to your water or drinking on ginger tea as part of your water intake. In some people sipping on carbonated mineral water will help bring about burping and digestive relief. Some people do well to massage their epigastric area downwards while seated upright to encourage the stomach to stay below the diaphragm (see Chapter 39 under abdominal massage).

Some people, particularly Yin Dominant body types, do not do well with the roughage in raw foods or the coldness of raw foods and juices. It causes irritability and digestive disturbances like gas, bloating, abdominal pain, and changes the stool quality. If this is how you typically respond to raw foods, then use a raw soup or smoothie to replace the raw food meal (Chapter 50). Another trick that seems to have helped my patients who have digestive upset after eating raw foods is to “raw cook” your veggies. Simply by allowing your fine cut veggies to “marinate” in a healthy salad dressing (with lemon or apple cider vinegar) for an hour or longer will actually break down the rough fibers and make it tolerable for most people to digest.

**YIN DOMINANTS** will feel particularly cold about now (especially if you are not doing this detox in the middle of summer). Turn up the heat and bundle up with gloves and hat if necessary. If this becomes overwhelming then return back to the Beginner Level Phase 1c or 1b for a few days before deciding to return to Intermediate Level or ramp down completely to Phase 1a or Vegan Diet Prep. If you want to push it through, then make sure your juices are at room temperature or better yet warm them up to body temperature by pouring them in a mug and heating the mug in a pot of hot water. Also make sure all your drinking water is hot

by storing it in a thermos. You can also drink hot herbal teas and hot veggie broth during this time to keep your temperature up. If you are losing too much weight too quickly then increase avocados, seeds, seed butters and their oils as a snack or blended into the smoothies. If you are Yin Dominant or experiencing Yin Dominant symptoms, I would also recommend taking a pinch of sea salt a few times a day to keep the blood pressure and body temperature from falling too low.

If you have **CONTRAINDICATIONS** or **RELATIVE CONTRAINDICATIONS** (see Chapter 7), only under the guidance of your holistic physician and monitored daily can you slowly try each of these Intermediate Level phases and observe how well you are feeling before moving onto the Advanced Level Detox (*if you have “CONTRAINDICATIONS” you CANNOT move to the Advanced Level unless you are under the direct supervision of a physician*).

If you have **RELATIVE CONTRAINDICATIONS** and are highly symptomatic (see Chapter 8) and you are not feeling well enough to move to the next level **DO NOT** proceed but rather take a step back to the Beginner Level phases 1b or 1c until you are ready to restart this Intermediate Level Phase 2 or break the cleanse entirely as instructed in Chapter 12.

**SHOPPING LIST for INTERMEDIATE LEVEL PHASE 2 DETOX:**  
All foods listed under “What to **ENCOURAGE** and **EMPHASIZE**.” Read the snack ideas, condiments, and meal plans and get an idea of what you plan on preparing for this week. I would recommend making a copy of these “Encourage and Emphasize foods” and take it to the grocery store as a shopping list.

**FOOD:** Same **VEGAN** program as found in Beginner Level Phase 1 Detox but now the foods are raw instead of cooked. You will also notice that the meals will begin to be replaced by juices. Juices are not smoothies- they are made with a juicer and are purely liquid. They are not to be gulped down but rather sipped and swished and swallowed slowly over the time you would typically eat a meal

(about 30 minutes). This allows them to be digested slowly into the blood stream. Juice recipes are found in Chapter 49 on juicing at the end of the book.

**WATER:** Sip your recommended minimum amount of fluid throughout the day in the form of pure water or herbal tea as recommended in the general guidelines (Chapter 11). Make sure to drink your fluids HOT if you are Yin Dominant or experiencing symptoms of being too cold.

**SUPPLEMENTS:** Discontinue as recommended in Beginner Level Detox. Also discontinue all non-necessary medications with the assistance of your physician. Do not discontinue prescribed medications unless advised by your physician to do so.

**ELIMINATION:** The plan is to have a minimum of 2-3 soft bowel movements daily. They should be easy to eliminate and feel completely evacuated. If your stool is too hard, strained, or too infrequent then increase water intake and add an herbal cathartic such as *Nature's Detox Intestinal Cleanse™ Part 2*. If your stool is too liquid or too frequent (more than 5 times daily) then add in *Nature's Detox Intestinal Cleanse™ Part 3* and more fiber from ground flax, chia or psyllium seeds (intestinal cleanses found at [www.drandroidwiverson.com](http://www.drandroidwiverson.com)).

This Intermediate Level Phase 2 Detox is a great time to utilize castor oil packs, enemas, and colonics (see Chapter 40). As you reduce your intake of food your bowel movements will naturally decrease in amount and frequency.

Urination should be frequent and the urine color should be light yellow (not clear). If it is any darker than light yellow then your water intake will need to be increased.

**IMPORTANT:** Gentle walking and stretching, mini-trampoline rebounders are helpful especially when done outside for fresh air and sun bathing. Rest is imperative. Nightly sleep no less than 8-10 hours, in a well ventilated room with an air purifier if possible. **Mental Rest:** refrain from emotionally stimulating movies, sport games, intensive reading, writing, or calculating. Prayer, meditation, and contemplation is encouraged.

**DIARY:** Continue your diary recording everything you are eating, drinking and your weight, vitals, sleep, mood, any symptoms, and any thoughts.

**What to ELIMINATE  
during INTERMEDIATE LEVEL PHASE 2 DETOX:**

Everything previously eliminated during the Vegan Diet Prep and Beginner Level Phase 1 foods and now you will **eliminate---** **ALL COOKED FOODS.**

**What to ENCOURAGE and EMPHASIZE  
during INTERMEDIATE  
LEVEL PHASE 2 DETOX:**

**FLUIDS:** water, veggie broths (see recipes Chapter 51), non-caffeinated herbal tea, water with fresh lemon lime juice, Rejuvelac (Chapter 51). Take these warm or hot if you are feeling too chilled.

Consider **HOT** teas with ginger, cinnamon, nutmeg, licorice or stevia for sugar cravings. Nettle, red raspberry, horsetail, chamomile, peppermint, are also nice to use during the cleanse. All non-caloric liquids can be used during the water fast and best if heated if you are feeling too cool.

**VEGETABLES:** Choose one or more of the veggies below to make your meals. In the **INTERMEDIATE LEVEL PHASE 2 DETOX** all

the food is RAW. You can eat as many of these as you wish to keep your energy up, however the average meal will contain between 4-6 cups of veggie material. As recommended above, for those who get digestive symptoms when eating raw food, consider making a raw soup or smoothie (Chapter 50) or allow your salad to marinate in a dressing for one or more hours before eating. Buy organic when possible.

artichoke heart	mushroom (all varieties)
asparagus	okra
beets (raw)	parsley
beet greens	parsnip (raw)
cactus nopales	peas (raw)
carrot (raw)	pumpkin (raw)
celery	radicchio
cilantro	spinach
collard greens	sprouts(all varieties)
cucumber	summer squash
endive	sweet potato (raw)
escarole	Swiss chard
fennel	tomato
ginger	turmeric
green beans	turnip greens
jicama	water chestnuts
kale	winter squash (raw)
kelp	yam (raw)
lettuce (all varieties)	zucchini

**FRUIT:** What to ENCOURAGE and EMPHASIZE during INTERMEDIATE LEVEL PHASE 2 DETOX.

Fruits permitted are only those in season and grown locally at the time of the cleanse. Fruits that are frozen from local seasonal fruit are also permitted; canned fruit is not permitted. **Fruit is only eaten as a snack away from meals (one serving = 1 cup)**

**or alone as a meal (1 cup) or in a smoothie (1 cup).** *Note: If you have a history of fungal, candida/yeast, urinary infections, dermatitis, chronic allergies, elevated blood sugar, or if you have an attraction to alcoholic beverages- I would advise to either avoid the fruit entirely or have just one serving in the afternoon daily. Buy organic when possible.*

apple	lime
apricot	mango
banana	nectarine
blackberries	orange
blueberries	papaya
boysenberries	peach
cantaloupe	pear
cherries	persimmon
cranberries	pineapple
gooseberries	plum
grapefruit	pomegranate
grapes	raspberries
guava	rhubarb
honeydew	strawberries
kiwi	tangerine
lemon	watermelon

**SEEDS, OILS:** What to ENCOURAGE and EMPHASIZE during INTERMEDIATE LEVEL PHASE 2 DETOX. Seeds are still permitted as long as they are raw (soaked) and chewed very well or in the form of raw seed butter. At this point in the program it would definitely be best to soak your seeds overnight if you plan on eating them. **You may add one of the permitted oils below to your raw food meal or smoothie in the form of whole seeds, seed butter, avocado or seed oil. The amounts are 1 small handful of seeds, 2 teaspoons of seed butters, ¼ whole avocado or 1 teaspoon of oil per meal.** If you are Yang Dominant this amount of fat is extremely limited or completely avoided for a period of time. If you are Yin Dominant or concerned about losing too much

weight or you are very active these amounts can be increased up to three times depending on the individual. Buy organic when possible.

**Raw Seeds: (1 handful or 2 tsps seed butter)**

chia seeds	psyllium seeds
flax seeds	pumpkin seeds
pine nuts	sesame seeds
poppy seeds	sunflower seeds

**Extra Virgin Cold Pressed Oils: (1 tsp)**

avocado oil	grape seed oil
black currant seed oil	hemp oil
borage oil	palm oil
evening primrose oil	sesame oil
extra virgin coconut oil	walnut oil
extra virgin olive oil	wheat germ oil
flax oil	

**Foods: (¼ cup)**

avocados  
homemade almond milk okay  
homemade coconut milk okay

**SNACK IDEAS: INTERMEDIATE LEVEL PHASE 2 DETOX:** As we transition away from meals we will want to be very careful with snacking. **We are trying to get the body adjusted to consuming less food so if you are not feeling hungry, don't snack at all.** Snacking can undermine your health goals if you snack too much on higher caloric food like seeds, fruit, and dips.

At this stage some may find it helpful to utilize fiber drinks to keep their energy up and feel satisfied: Fiber Drink: 1-3 teaspoons psyllium, flax, chia, or apple pectin shaken in a jar with 8-12 oz water: follow with another full glass of water to prevent constipation from swelling fiber.

- fiber drinks
- raw veggies: carrot sticks, celery sticks, cucumber slices, jicama, - any veggie on list
- homemade dips from seed butter, pesto, guacamole
- one piece of fresh fruit (with raw seeds or seed butter)
- handful of raw soaked seeds
- homemade fruit gelatin (see recipes Chapter 51)
- small smoothie
- dried seaweed

## CONDIMENTS: INTERMEDIATE LEVEL PHASE 2 DETOX

herb seasonings: (*all herbs and non-pungent spices may be used as condiments*)

unfiltered raw apple cider

vinegar

fresh lemon or lime juice

all oils and seed butters listed above

guacamole dip

veggie broths (see recipes Chapter 51)

powdered kelp, dulse, or other seaweed

Mrs. Dash, Spike, Simply Organic dressing mixes (these have onions, garlic, black pepper and may not be tolerated well at this point in the cleanse. I wouldn’t recommend these unless you must have them to feel satisfied. Please use caution.)

## MEAL PLANNER & MENU IDEAS:

### What to ENCOURAGE and EMPHASIZE during INTERMEDIATE LEVEL PHASE 2 DETOX

This diet is considered clean and RAW and is the next step in preparing you for more challenging dietary detoxification. Here is a list of raw meal ideas of which you will find recipes in the basic recipes section in the back of the book Chapter 51. You can choose one of these ideas or create your own from the permitted vegetable list (about 4-6 cups of raw plant material per meal). Alternately you may choose to blend a smoothie from one of the raw smoothie

recipes in the smoothie chapter. Because you are eating just raw food, you may feel hungry through the day so make sure you have enough food already prepared so you can eat as much at your meal as necessary to feel satisfied.

**JUICES:** choose any juice in the recipes section in Chapter 49 or make your own. If you make up your own recipe then be sure to add no more than 50% of the total juice as apple, carrot, beet or other sweet ingredient. The juice serving is 16 ounces “per meal” which is sipped and swished and swallowed slowly over 30-60 minutes. You may drink these at room temperature or warm to body temperature if you are feeling chilled.

**FOR RAW MEALS:** *Remember there are no set breakfast, lunch, or dinner foods. Any meal can be eaten at any time of the day.*

Choose any Smoothie in the recipe section Chapter 50

Choose any Raw Soup in the recipe section Chapter 50

Choose any Salad in the recipe section Chapter 51 or choose from those below (about 4-6 cups)

green salad

fennel salad

beet salad

kale salad

leaf lettuce, sprouts, tomato,  
salad

carrot salad

Romaine salad

spring green salad

garden salad

jicama carrot salad

pea pod salad

tomato and cucumber salad

spinach salad

sprout salad

European salad greens

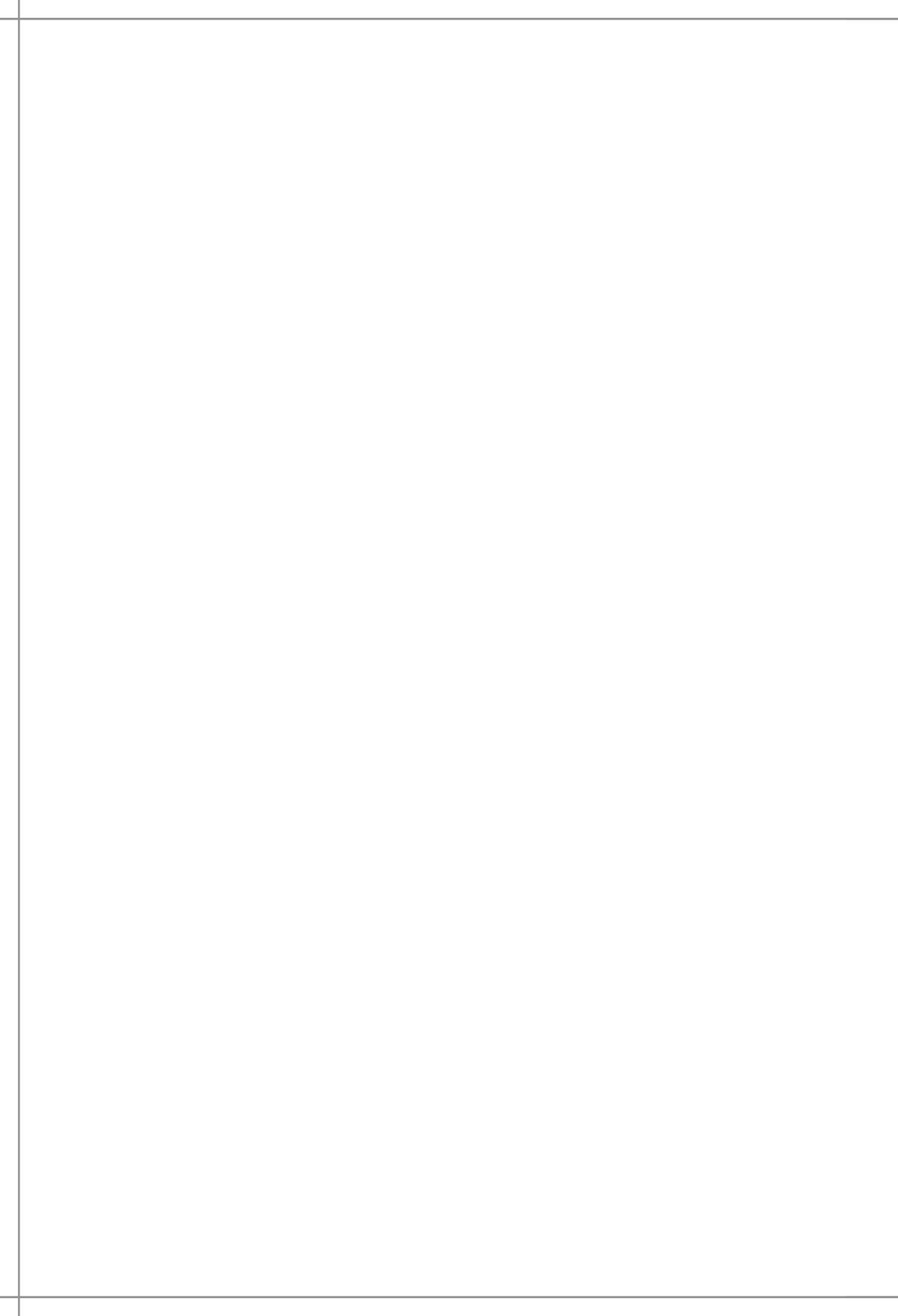
fennel and endive salad

raw veggies: cucumber, peas,  
tomato, sprouts, carrot

endive radicchio salad

Bibb salad

arugula salad



## Chapter 18

### ADVANCED Level Phase 3 Nature's Detox and Prep for Expert Level- WATER FASTING

If you have made it this far it means that you are doing well on a couple veggie juices a day and are ready to try a complete liquid diet. This is where people really notice a difference in the way their body feels as it moves into a state of ketosis. Although the shift can be tough for some people, once a person is adjusted to ketosis they tend to feel pretty good. The ketotic state is where so many of the benefits of fasting take place which you'll learn about in the subsequent chapters. **You cannot just jump into this level so make sure you have followed the instructions and spent at least a day in each Intermediate Level phase before starting this Advanced Level.** Most *relatively healthy people are fine if they spend one day in each of these phases*, however it is just fine if you need to spend longer at a particular phase and then conclude the cleanse or continue to the final Expert Level Phase 4 Detox with your doctor's permission and guidance.

After spending some time at this level Advanced Level Phase 3, the majority of people will feel they have met their goals and are ready to end the cleanse. If this is the case follow the instructions explicitly as written in Chapter 12 and break the cleanse by reversing

in the Phases 2c, 2b, 2a, 1c, 1b, until you resume maintenance with Phase 1a or Vegan Diet Prep or *Nature’s Diet*.

**WARNING:** Please do not overdo it! I do not recommend people to work during this phase, however, many of my patients say they do fine with gentle activities; nothing physically, intellectually, or emotionally challenging. If you at all feel weak, or you notice an increase in the common symptoms, then it is imperative to drink more liquids and rest. If the symptoms persist for more than a day then reverse the cleanse back one level to the Intermediate or even Beginner Level Detox.

*If the symptoms become intolerable or concerning, then break the fast immediately as explained in Chapter 9 with a cooked sweet potato, yam, potato or cooked carrots drizzled with a little olive oil and a sprinkle of sea salt. Chew this slowly and contact the health professional who is assisting you during this detox diet. If you broke the cleanse because of experiencing strong detox symptoms and you needed to eat a sweet potato, yam or cooked carrot- then resume back on Beginner Level Phase 1a until your symptoms are gone and your physician clears that you are able to start up again from Intermediate Level Phase 2a, 2b or 2c.*

**ADVANCED LEVEL NATURE’S DETOX PHASE 3A-3C:** For advanced cleansing or preparation for Expert Level Phase 4 Detox: water-only fasting.

Phase 3a	Three vegetable juices (not smoothies)- no solid foods
Phase 3b	Two vegetable juices & one electrolyte drink: broth or wheat grass serving
Phase 3c	One vegetable juice & two electrolyte drinks: broth or wheat grass servings

Having just liquid is a whole new experience- especially as you decrease the caloric content of the liquid by drinking just wheatgrass juice, veggie broth, or herbal teas. Now the body can utilize the energy it formerly needed to digest food to instead focus on healing the body. The digestive enzymes used to digest food can be diverted

to digest waste byproducts in the blood stream as you will learn in later chapters.

Many of you will decide to reverse the cleanse after this advanced phase and not enter the electrolyte water “expert” phase at all- and that is just fine. Some peoples’ bodies are either not physically capable to handle an expert level cleanse or they are naturally built with excess “YIN” dominance and therefore they cannot tolerate such a strong detox or catabolism of their tissues. If at any time during this Advanced Level Detox you are feeling symptoms you must go back one or more levels until you are feeling better. **If you did well on the Intermediate Levels, you will spend at least one day in each of the Advanced Level Phases 3a, 3b, and 3c before moving on to the Expert Level water-only fasting.**

It is not common, but some people may feel REFLUX or HEARTBURN at this point in the fast. If this is the case then you will want to change the juices to contain less carrots or beets which can cause this in some people. You may also want to make your juices more simple with less ingredients. The other possibility is the juices are too cold- I recommend warming them up to body temperature by putting the juice in a mug and heating the mug in a pot of hot water until a desired temperature is reached. I will also recommend adding fresh squeezed lemon or lime juice to your water or drinking on ginger tea as part of your water intake. In some people sipping on carbonated mineral water will help bring about burping and digestive relief. Some people do well to massage their epigastric area downwards while seated upright to encourage the stomach to stay below the diaphragm (see Chapter 39 under abdominal massage).

YIN DOMINANTS will feel particularly cold about now (especially if you are not doing this detox in the middle of summer). Turn up the heat and bundle up with gloves and hat if necessary. If this becomes overwhelming then return back to the Intermediate Level Phases 2b or 2a for a few days to complete the cleanse and then ramp back down through the phases to Phase 1a or Vegan Diet Prep. If you want to push it through, then make sure your juices are at room temperature or better yet warm them up to body

temperature by pouring them in a mug and heating the mug in a pot of hot water. Also make sure all your drinking water is hot by storing it in a thermos. You can also drink hot herbal teas and hot veggie broth during this time to keep your temperature up. If you are experiencing excessive Yin Dominant symptoms, I would also recommend taking a pinch of sea salt a few times a day to keep the blood pressure and body temperature from falling too low.

If you have **CONTRAINDICATIONS** (see Chapter 7) *you CANNOT move to this Advanced Level unless you are okayed by your physician and in a fasting retreat under the direct professional supervision.*

If you have **RELATIVE CONTRAINDICATIONS** (Chapter 7), only under the guidance of your holistic physician and monitored daily can you slowly try each of these Advanced Level phases and observe how well you are feeling before moving onto the Expert Level of water-only fasting. If you are highly symptomatic (see Chapter 8) and you are not feeling well enough to move to the next level **DO NOT** proceed but rather take a step back to the Intermediate Level Phases 2a, 2b or 2c until you are ready to restart this Advanced Level again or ramp back down to Phase 1a or Vegan Diet Prep and break the cleanse entirely as instructed in Chapter 12.

**SHOPPING LIST for ADVANCED LEVEL PHASE 3 DETOX:** All foods listed under “What to **ENCOURAGE** and **EMPHASIZE**.” I would recommend making a copy of these “Encourage and Emphasize foods” and take it to the grocery store as a shopping list.

**FOOD:** same **VEGAN** program as found in Intermediate Level Detox but now you will eliminate all solid foods, fruits, seeds, and oils. Juices are to be sipped and swished and swallowed slowly over the time you would typically eat a meal (about 30 minutes). This allows them to be digested slowly into the blood stream. Juice recipes are found in Chapter 49 on juices.

**WATER:** Sip your recommended minimum amount of fluid throughout the day in the form of pure water or herbal tea as

recommended in the general guidelines (Chapter 11). Make sure to drink your fluids **HOT** if you are Yin Dominant or experiencing symptoms of being too cold.

**SUPPLEMENTS:** Discontinue as recommended in the Intermediate Level Detox. Also discontinue all non-necessary medications with the assistance of your physician. Do not discontinue prescribed medications unless advised by your physician to do so.

**ELIMINATION:** Because you're now consuming less food, your bowel movements will also slow down. During this time I do not recommend forcing a bowel movement with a laxative unless you are uncomfortable with feelings of constipation. Allow any stool at this point to come naturally, even if you are having just one bowel movement per day or less. Even at this **ADVANCED LEVEL PHASE 3 DETOX** it is still a great time to utilize castor oil packs, enemas, and colonics (see Chapter 40). Caution however; these hydrotherapy treatments can drain electrolytes easily when you are liquid fasting. I do not recommend more than one every 3 days while on this Advanced Level Phase 3.

Urination should be frequent and the urine color should be light yellow (not clear). If it is any darker than light yellow then your water intake will need to be increased.

**IMPORTANT:** Rest is imperative. Nightly sleep no less than 8-10 hours, in a well ventilated room with an air purifier if possible. **Mental Rest:** refrain from emotionally stimulating movies, sport games, intensive reading, writing, or calculating. Prayer, meditation, and contemplation is encouraged.

**DIARY:** Continue your diary recording everything you are eating, drinking and your weight, vitals, sleep, mood, any symptoms, and any thoughts.

### **What to ELIMINATE during ADVANCED LEVEL PHASE 3 DETOX:**

Everything previously eliminated during the Intermediate Level Detox and now you will **eliminate--- ALL SOLID FOODS**. Any food in the permitted list is for making juices only.

Also completely eliminate all fruits except those in the permitted list and eliminate all seeds and oils including extra virgin olive oil and avocado.

*If you are someone with osteoarthritis, rheumatoid arthritis or an autoimmune condition, you may choose to eliminate tomatoes as well at this point.*

### **What to ENCOURAGE and EMPHASIZE during ADVANCED LEVEL PHASE 3 DETOX:**

**FOOD= JUICES:** only veggies and limited fruits made into a liquid juice from the list below. You may drink these at room temperature or warm to body temperature if you are feeling chilled.

**FLUIDS:** water, veggie broths (see recipes Chapter 51), non-caffeinated herbal teas, water with fresh lemon lime juice, Rejuvelac (Chapter 51). Take these warm or hot if you are feeling too chilled.

Consider **HOT** teas with ginger, cinnamon, nutmeg, licorice or stevia for sugar cravings. Nettle, red raspberry, horsetail, chamomile, peppermint, are also nice to use during the cleanse. All non-caloric liquids can be used during the water fast and best if heated if you are feeling too cool.

**VEGETABLES:** Any of these raw vegetables can be juiced into your own recipe to make juice or electrolyte drinks or follow those recipes in the book. Buy organic when possible.

asparagus	lettuce (all varieties)
beets (raw)	parsley
beet greens	pumpkin (raw)
cactus nopales	radicchio
carrot (raw)	spinach
celery	summer squash
cilantro	sweet potato (raw)
collard greens	Swiss chard
cucumber	tomato ( <i>some will choose to avoid at this point</i> )
endive	turmeric
fennel	turnip greens
ginger	wheat grass juice
green beans	winter squash (raw)
Jerusalem artichokes (raw)	yam (raw)
jicama	zucchini
kale	

**FRUIT: What to ENCOURAGE and EMPHASIZE during ADVANCED LEVEL PHASE 3 DETOX.**

Only juice those listed below that are in season and grown locally at the time of this detox to make juices or electrolyte drinks. *Note: If you have a history of fungal, candida/yeast urinary infections, dermatitis, chronic allergies, elevated blood sugar, or if you have an attraction to alcoholic beverages- I would advise to either avoid the fruit entirely or have just one serving in the afternoon daily. Buy organic when possible.*

apple	pear
lemon	papaya
lime	pineapple

## MEAL PLANNER & MENU IDEAS:

### What to ENCOURAGE and EMPHASIZE during ADVANCED LEVEL PHASE 3 DETOX

**JUICES:** Choose any juice in the recipes section in Chapter 49 or make your own. If you make up your own recipe then be sure to add no more than 50% of the total juice as apple, carrot, beet or other sweet ingredient. The juice serving is 16 ounces “per meal” which is sipped and swished and swallowed slowly over 30-60 minutes. If you are becoming too cold then warm the juices to room or body temperature.

**ELECTROLYTE DRINKS:** These drinks are very low in calories and still high in mineral electrolytes so you can continue deeper into the cleanse and minimize the symptoms and potential dangers of the electrolyte imbalances seen in water-only fasting. Electrolyte drinks are veggie broths, wheat grass juice diluted with water, ¼ whole organic lemon blended with 16 oz water, 2 Tbs apple cider vinegar in 16 oz water, Rejuvelac (Chapter 51) or any juice recipe that is diluted mostly with water (see juice recipes in Chapter 49 in the back of the book).

Wheat grass juice would best be made fresh at home from home grown grasses or purchased fresh daily from a health food store. I recommend diluting 1 oz of the juice in 8-12 ounces of water and sipping over 30 minutes which most people tolerate better than taking the “wheatgrass shot” straight.

A large pot of Veggie Broth can be made as written in the recipe section in the back of the book Chapter 51 and stored in the fridge at all times during the detox. I recommend heating 16 oz and sipping it over 30 minutes. This can be especially beneficial for the Yin Dominant that is feeling cold and needing an extra boost.

## Chapter 19

### **EXPERT Level Phase 4 Nature's Detox: Electrolyte and Water-only Fasting.**

If you are reading this page it means that you have made it through all the prep work (Beginner, Intermediate, and Advanced Levels) and you are ready to try one or more days of water fasting. You are also being followed by your physician *no matter what your level of health* and you have made sure that you have none of the contraindications as listed in Chapter 7. At this point you have already reached a major milestone. Do not feel you have to continue just to say you did or to prove anyone anything. Listen to your body and see if it is responding well and if it feels okay to continue. You may decide to conclude the cleanse or you may decide to do just one day at this Expert Level. Whatever the decision, keep in mind the necessity to rest and focus only on your healing.

**EXPERT LEVEL NATURE'S DETOX PHASE 4A-4C:** For expert cleansing; to conclude and reverse the phases for refeeding or in preparation for water-only fasting (supervised only).

Phase 4a	Three electrolyte drinks: veggie broths, lemon water, Rejuvelac, or wheat grass juices no other concentrated beverages
Phase 4b	Two electrolyte drinks & 1 herbal tea
Phase 4c	One electrolyte drink & 2 herbal teas
REFEED=	REVERSE THE PHASES 3c, 3b, 3a, 2c, 2b, 2a, 1c, 1b, 1a, Vegan Diet Prep
or FASTING*	*Purified Water Only- ONLY UNDER PROFESSIONAL MEDICAL GUIDANCE*

Like all the other levels this one also tapers the phases becoming more difficult each day of the Expert program. It starts with three electrolyte drinks in the form of veggie broths, lemon water, or diluted wheat grass water and then slowly tapers to herbal teas and pure water. All of these liquids are very similar metabolically in the body because they are essentially utilizing a very low to non-caloric substance. They are all equally effective for cleansing purposes and there really isn’t a strong differentiation between phases 4a, 4b, or 4c. For this reason, to prevent any of the possible side effects that can occur with a pure water-only fast, *I am asking you to not proceed any further than what I have recommended here unless you are under direct professional medical guidance in a retreat setting.*

After you have finished with these three days at the Expert Level Phases you are to break the fasting properly as instructed in Chapter 12 by working your way back down ideally spending one day in each of the phases or at the minimum one day in each level. For example proceed with Advanced Level 3c, 3b, 3a onto Intermediate Level 2c, 2b, 2a and Beginner Level 1c, 1b, 1a. If you are on a time crunch then you can hasten the process by spending one day in Advanced level, one day in Intermediate level, and one day in Beginner level choosing any of the phases in each level before returning to Phase 1a or Vegan Diet Prep. For those who are really enjoying the cleansing process you can descend more slowly and stay at any of these levels for as long as you and your physician decide it is safe for you to do so as you ramp down to the Phase 1a or Vegan Diet Prep.

After concluding these three days at the Expert Level, and if you head back down through the phases as instructed, you will have spent a total of 9 of the 21 days on a liquid diet! This is more than adequate to shift the body chemistry to bring about some lasting and beneficial changes. If you desire, you can take a break for 3-4 weeks while eating from Phase 1a or Vegan Diet Prep before restarting up the process again. This is especially beneficial for those with persistent or challenging health conditions that would benefit from additional cleansing. Ask your doctor about this and see Chapter 21 on “Repeating and Modifying” for other fasting schedule plans that might work out for you long term.

Many people find that drinking purified water and these non-caloric drinks are much more balancing for the mind and body and easier than consuming juices because you don’t have the rise and fall of glucose. By this point, the body will also be in a state of ketosis which means it is almost exclusively burning excess fat for energy. It is in these ketotic states that much of the profound benefits attributed to fasting take place. If this type of cleanse feels good to you and you wish to proceed with fasting more than three days on the electrolyte drinks or pure water *then I urge you to only proceed under your doctor’s guidance or at a supervised fasting facility*. You will have to be monitored by someone who recognizes possible danger signs and they will also have to draw your blood every week to make sure your potassium levels are not falling in critically dangerous levels (Chapter 31).

**MANDATORY REST:** During these three days on the Expert Level Phase 4 do not go to work and do not work at your home. You may only rest and rest alone. You’ll notice that your brain is less sharp and your reaction times are less quick. Driving your car is not a safe place to be for you or others while you are in a fasting state. This is the time for complete rest. I even discourage book reading, movie watching, or even gentle walking if you feel these activities are mentally or physically exhausting. Follow your own body; some people do better than others. If you notice any detox symptoms that are uncomfortable or are persistent for more than a day,

then reverse the cleanse back one level to the Advanced or even the Intermediate Levels until you feel better. **If the symptoms become intolerable or concerning, then break the fast immediately as written in Chapter 9 with a cooked sweet potato, yam, potato or cooked carrots drizzled with a little olive oil and a sprinkle of sea salt.** Chew this slowly and contact the health professional who is assisting you during this detox diet. If you broke the cleanse because of experiencing strong detox symptoms and you needed to eat a sweet potato, yam or cooked carrot- then resume back on Vegan Diet Prep or Beginner Level Phase 1a until your symptoms are gone and your physician clears that you are able to start up again from Beginner or Intermediate Levels

Some people may start to feel REFLUX or HEARTBURN as the fast progresses. I recommend only drinking warm or hot water if this is the case. You might try adding fresh squeezed lemon juice or grated ginger to make a tea and drink as part of your water intake. In some people sipping on carbonated mineral water will help bring about burping and digestive relief. Some people like to just chew on a slice of fresh ginger. Massaging the epigastric area downwards while seated upright encourages the stomach to stay below the diaphragm and can also help with reflux (see Chapter 39 under abdominal massage).

YIN DOMINANTS may choose not to do this Expert Level at all but rather extend the Advanced Level or return to the Intermediate and Beginner levels for the remainder of the cleanse. As written before, all your liquids including your water must be drunk HOT to keep your temperature up.

If you have CONTRAINDICATIONS or RELATIVE CONTRAINDICATION (see Chapter 7) you are only to proceed to Expert Level water-only fasting under the guidance of a professional, in-house medical fasting facility- NO EXCEPTIONS.

SHOPPING LIST for EXPERT LEVEL PHASE 4 DETOX: All foods listed under “What to ENCOURAGE and EMPHASIZE.”

**WATER:** Sip your recommended minimum amount of fluid throughout the day in the form of pure water or herbal tea as recommended in the general guidelines (Chapter II). Make sure to drink your fluids **HOT** if you are Yin Dominant or experiencing symptoms of being too cold.

**SUPPLEMENTS:** Discontinue as in Advanced Level Detox. Also discontinue all non-necessary medications with the assistance of your physician. Do not discontinue prescribed medications unless advised by your physician to do so.

**ELIMINATION:** Because you're now consuming mostly just water and electrolytes your bowel movements may stop completely. It is common to still have a real dark bowel movement sloughing off dead cells or a mucus-filled bowel movement. During this time I do not recommend forcing a bowel movement with a laxative. Allow any stool at this point to come naturally. I also **DO NOT** recommend castor oil packs, enemas, or colonics unless you are uncomfortable with symptoms of constipation. During this phase allow the body to eliminate naturally and heal naturally.

Urination should be frequent and the urine color should still be light yellow in color (not clear). If it is any darker than light yellow then your water intake will need to be increased.

**DIARY:** Continue your diary recording everything you are eating, drinking and your weight, vitals, sleep, mood, any symptoms, and any thoughts.

### **What to ELIMINATE during EXPERT LEVEL PHASE 4 DETOX:**

Everything previously eliminated during the Advanced Level Detox and now you will **eliminate---** **ALL JUICES.**

**What to ENCOURAGE and EMPHASIZE  
during EXPERT  
LEVEL PHASE 4 DETOX:**

**FLUIDS:** water, veggie broths, diluted veggie juices, diluted wheat grass juice, non-caffeinated herbal tea, water with raw apple cider vinegar or fresh lemon or lime juice, Rejuvelac (Chapter 51). Take these warm or hot if you are feeling too chilled.

**MEAL PLANNER & MENU IDEAS for EXPERT LEVEL PHASE 4  
DETOX :**

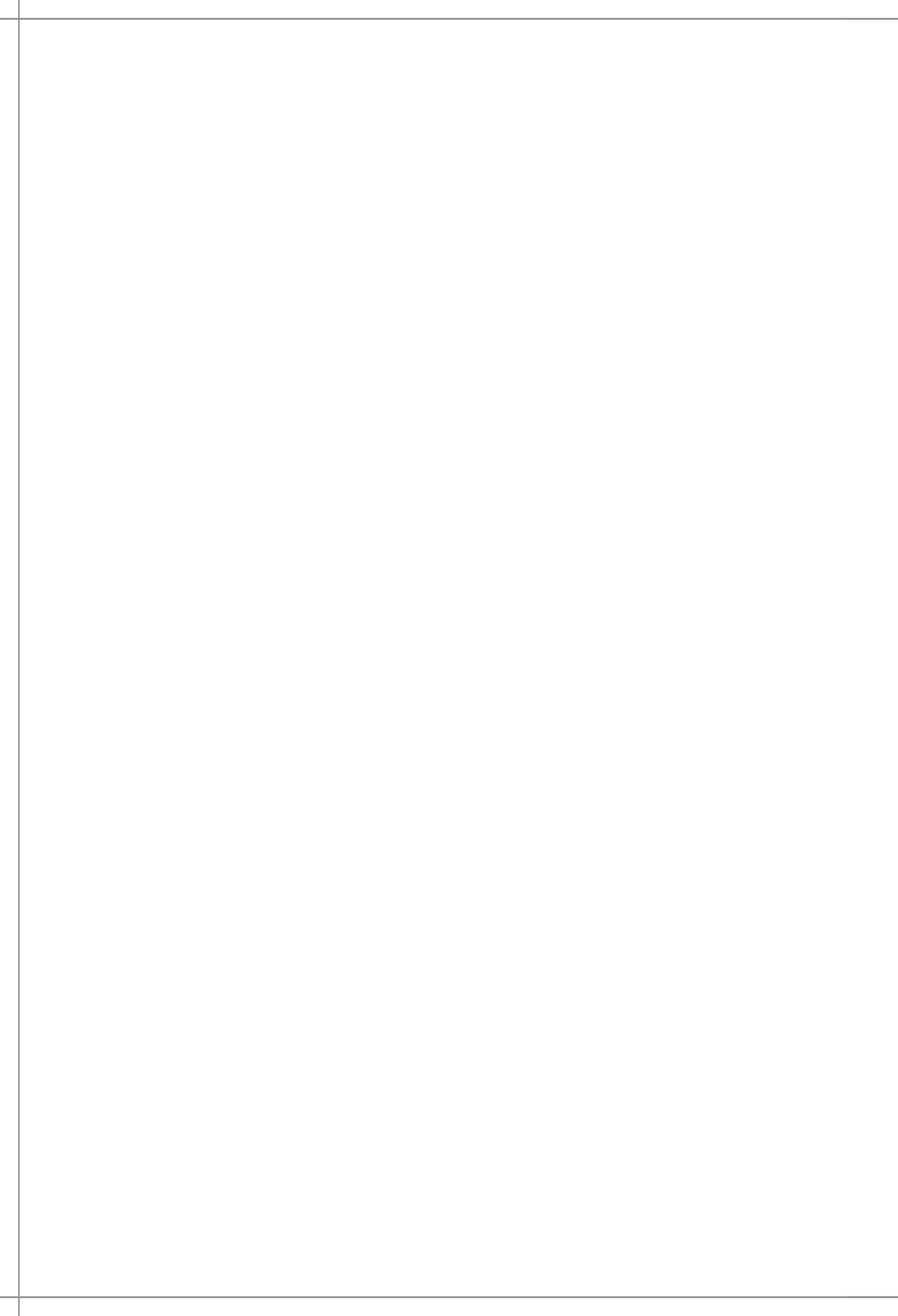
**ELECTROLYTE DRINKS:** These drinks are very low in calories and still high in mineral electrolytes so you can continue deeper into the cleanse and minimize the symptoms and potential dangers of the electrolyte imbalances seen in water-only fasting.

Electrolyte drinks are veggie broths, wheat grass juice diluted with water, apple cider vinegar diluted with water, or ¼ whole organic lemon or lime blended with 16 oz water, Rejuvelac (Chapter 51), or any veggie juice recipe that is diluted mostly with water (see juice recipes Chapter 49 in the back of the book).

Wheat grass juice would best be made fresh at home from home grown grasses or purchased fresh daily from a health food store. I recommend diluting 1 oz of the juice in 8-12 ounces of water and sipping over 30 minutes which most people tolerate better than taking the “wheatgrass shot” straight.

A large pot of Veggie Broth can be made as written in the recipe section in the back of the book Chapter 51 and stored in the fridge at all times during the detox. I recommend heating 16 oz and sipping it over 30 minutes. This can be especially beneficial for the Yin Dominant that is feeling cold and needing an extra boost.

HERBAL TEAS high in electrolytes can also be enjoyed hot as part of the water intake. During a fast I like to utilize these to your desire: nettle, red raspberry, horsetail, oat straw, chamomile, peppermint, ginger, cinnamon, nutmeg, any non-caffeinated tea



## *Chapter 20*

### **SAMPLE Day Schedule**

**S**ample day Schedule for Vegan Diet, Beginner and Intermediate Level Phases must make sure the bowels are open at all times encourage the 8 hour window if possible during the Vegan Diet Prep

6:00 AM: RISING: drink 12-16 oz water by your bedside before standing

Exercise: The Five Rights, yoga, walking, meditation, prayer, writing in diary and goals

Enema (if can't do in the evening)

Dry brush first then warm water shower or bath followed by cool water rinse

Lemon water/Apple cider vinegar drink and/or Rejuvelac (Chapter 51) – stimulate appetite

7:00 AM or 8 AM Breakfast: selection from any of the approved menu options

Water

Midmorning Snack: any listed under permissible snacks or Fiber Drink for extra colon cleansing

Fiber Drink: 1-3 teaspoons psyllium, flax, chia, or apple pectin shaken in a jar with 8-12 oz Water: follow with another full glass of water to prevent constipation from swelling fiber

Water

11:00 AM or 12 PM Lunch: largest meal of the day

Water

Midafternoon snack: any listed under permissible snacks or Fiber Drink for extra colon cleansing

Water

3:00 PM Dinner (can delay until 4 PM or 5 PM if necessary due to personal schedule)

Water

6:00 PM or 7 PM: Castor oil pack and enema following

Evening drink to soothe cravings if necessary: herbal tea or seltzer water with lemon/lime

Evening contemplation, journaling, yoga, meditation, prayer

Sleep before 10 pm

## Chapter 21

### Repeating, Modifying and Intermittent Fasting Schedules How Often and How Long?

**B**efore we discuss about repeating *Nature's Detox* we need to determine how you fared through this cleanse the first time. If you were **able to complete** the entire 21 day *Nature's Detox* and you felt okay throughout, then the next time you may want to spend more days in the Intermediate, Advanced or even Expert Levels. If you were **unable to complete** the entire *Nature's Detox* then the next time spend more days in the phase right before you became symptomatic. For example if you became symptomatic at Phase 2b and couldn't go further, then next time stay at 2a for several days to a week before continuing to Phase 2b. At that point continue to progress beyond 2b or stay at 2b a couple days and then ramp back down to 2a and then Vegan Diet Prep to conclude the cleanse.

The beauty of this program is you can tailor it to however you desire as long as you follow the principles for entering and breaking the cleanse. The intensity and duration of any detox is determined by your personal health goals. If you are currently treating yourself for a health condition or specific symptoms then consider being on a Vegan Diet Prep or the Beginner Level diet indefinitely until you see considerable improvement. These are health promoting diets

that actually act as gentle cleanses over a period of time. Although restrictive, most people do quite well on these diets and continue on them until they feel better. During these gentle diets one can also turn up the healing potential by adding in botanical formulas such as *Nature's Detox Herbal Cleanses™* for intestinal, liver, urinary systems as well as hydrotherapy, castor oil packs, dry brushing, and massage which are all discussed in this book. So in summary, some people with health challenges can be on the gentler cleanses for months at a time as a much safer and beneficial option to water fasts.

If you are a generally healthy person and you want to repeat *Nature's Detox* then consider doing it in its entirety at least twice yearly. Much of the research indicates that the effects of a profound dietary shift like this can last for months after concluding and if you continue to eat well the effects can last much longer. The other option is to repeat a shortened version of *Nature's Detox* every 90-120 if you felt it was too extensive.

Some people fared well on *Nature's Detox* and would rather jump into the Advanced or Expert Levels hard and fast the next time. In that case an individual would spend at least one day in Vegan Diet Prep, one day in Beginner and Intermediate Levels and then jump into the Advanced Level Phases. To break that fast properly, take the number of days you fast at the Advanced or Expert Level Phases and divide by two and phase that number of days back down. For example if you stayed 4 days at the Advanced Level you would spend 2 days in breaking the fast (1 day in the Intermediate Level diet and 1 day in the Beginner level Diet) before returning to Vegan Diet Prep or *Nature's Diet*.

Once your body becomes accustomed to a reduced caloric intake you may just like the way you feel so much you want to jump back into it and alternate between fasting and a cleansing diet. This process is another form of “intermittent fasting” and can be an excellent way to create profound deep healing through catabolic break down cycles and anabolic build up cycles. This was one of the favorite treatment methods of my teacher's teacher Dr. Carey Reams who used this technique on many of the patients at

his retreat centers. An intermittent fasting schedule may follow a timeline such as this:

Vegan Diet Prep= 1 week, Beginner Level= 1 day, Intermediate Level= 1 day, Advanced Level =3 days, Intermediate Level = 1 day, Beginner Level = 1 day, Vegan Diet Prep 1-2 weeks: repeat as desired. Or some other intermittent fasting schedule options: 3 days on 3 days off, 1 day on 3 days off, 2 days on 5 days off, 3 days on 2 weeks off or a similar schedule of your choice alternating between Beginner, Intermediate or Advanced detoxes and Vegan Diet Prep.

What if I want to mix the phases for a daily or weekly program? This is perfectly fine as long as you have accomplished going through all of the phases you plan on mixing. For example, if you want to mix Advanced and Beginner Levels, you must make sure that you have experienced the phases of the Advanced Levels before you begin to make sure you can tolerate it. An example of mixing the phases in a day might look like this: a veggie juice or smoothie for breakfast, a meal from Vegan Diet Prep for lunch and a vegetable broth in the evening. Some are not able to make extreme jumps between levels so only mix the phases that you can physically tolerate.

Another version of conducting a DAILY detox is to follow the 8 hour window intermittent fast as I have instructed previously. Giving the body a full 16 hours to clean at the end of the day is like doing the powerful work of fasting on a daily basis. You will feel the results rapidly too. At first the body will not like the sluggish feeling at the end of the day and will force you to bed early. However, before you know it you will be requiring less sleep and less food and coming into your optimal weight with great energy. Again the way to do this is to finish your breakfast at 7 AM and your last meal by 3 PM.

Even cleansing once a year for a few days is better than no cleansing at all, as proven by the incredible findings I have outlined in the next chapter on “how fasting works.” I tell patients there is never a convenient time to cleanse. Something is always going to be happening in our busy lives. I recommend pulling out the calendar and marking the days you commit to cleansing just as you commit to any other engagement. Otherwise, it is just too easy to make

– Repeating, Modifying and Intermittent Fasting Schedules  
How Often and How Long? –

another excuse for not doing it week after week. Starting at the change of the seasons is a perfect time as the body transitions with the planet from one phase to the next.

#### Examples of Cleansing Schedules:

- 1) *Nature's Detox* 21 day program as instructed twice yearly
- 2) Vegan Diet Prep or Beginner Level Phases indefinitely until your goal is reached (Combine herbal cleanses and the daily 8 hour window schedule in place)
- 3) Intermittent Fasting: Intermediate or Advanced Level Detox alternating with Vegan Diet Prep or Beginner Level Diets until the goal is reached (3 days on the detox 3 days off, 1 day on 3 days off, 2 days on 5 days off, 3 days on 2 weeks off or a similar schedule of your choice alternating fasting and eating a healthy diet)
- 4) Extended periods at Advanced or Expert levels (under guidance of physician). Follow proper preparation and breaking as written.

## *Chapter 22*

### **The Results!**

#### **What symptoms and conditions improve?**

**S**o why go through all this trouble to detoxify the body with special diets and herbs? Because changes happen on a physiological level that can profoundly reduce physical symptoms and even the related health conditions. Unfortunately, most conventional doctors do not feel that “cleansing,” “detoxification,” or “fasting” are well studied and therefore are not valid treatments. I would hope that after some personal investigation on the following, you will see otherwise.

Dozens of studies have proven that **REDUCING CALORIES** profoundly improves physical symptoms and even related health conditions. Fasting and calorie reduction continues to prove the most reliable method of any to increase life span and promote anti-aging mechanisms.<sup>1</sup> Due to this fantastic finding, it would be inferred that detoxification and fasting would improve or reverse chronic conditions that end a person’s life prematurely. Conditions like diabetes, heart disease, stroke, cancer, and autoimmune disease. Although, in my clinical experience patients with cancer tend to respond more favorably to an ultraclean diet and detoxification with botanical medicine, heart disease, diabetes and autoimmune diseases have been treated favorably with fasting. 1) Ageing Res Rev 2016 Aug 17, 1568-1637(16

So why not go for the younger healthier you! Soften wrinkles, tighten skin, lose the puffiness and the dark circles under the eyes. Tighten the tummy and tuck the buttocks all for a fraction of the price of a surgery (actually for almost free) and with the bonus side benefits of all the following health improvements.

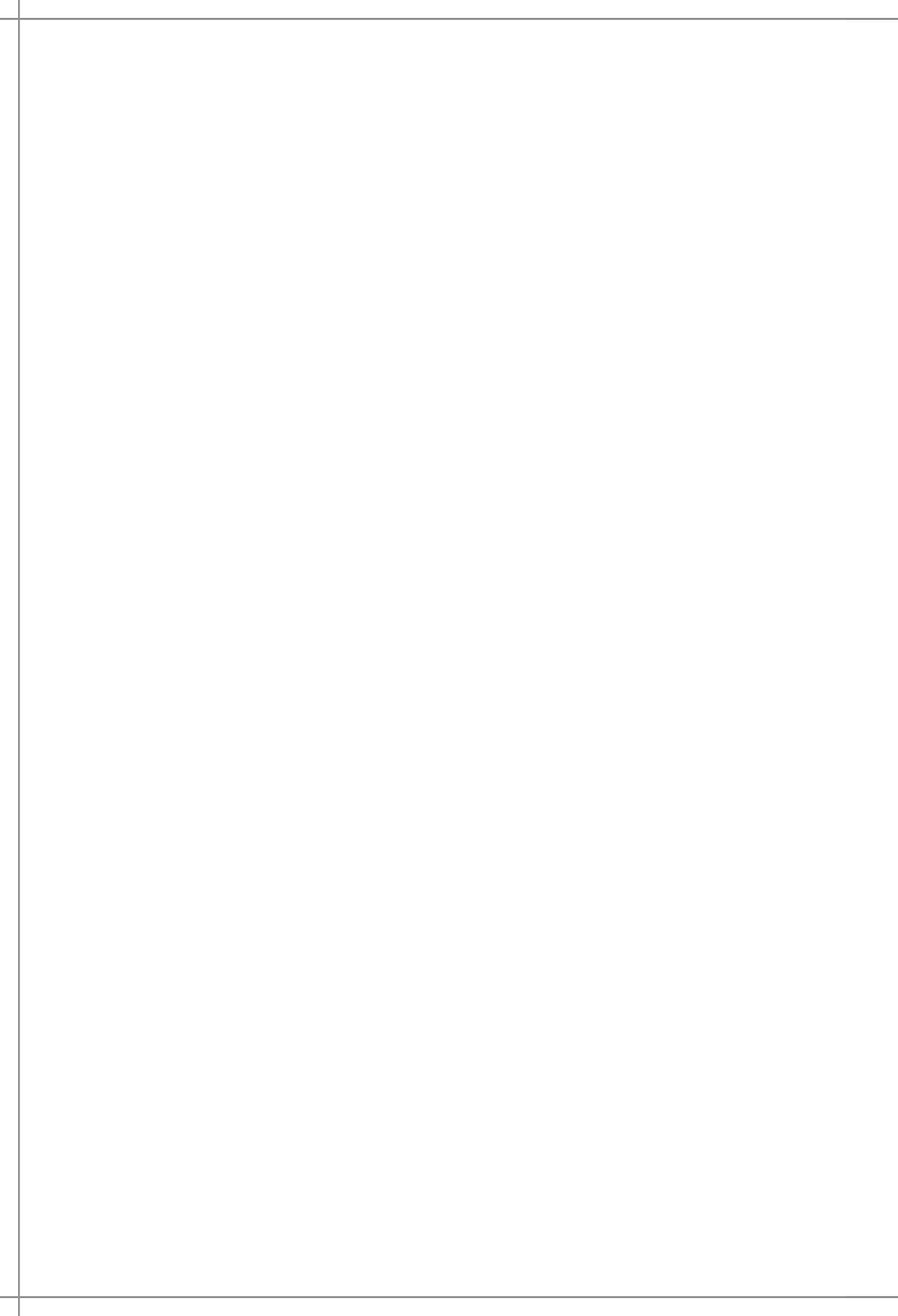
Here are some of the physiological benefits seen after cleansing with *Nature's Detox* and eventually transitioning back into Phase Ia or Vegan Diet Prep or *Nature's Diet*.

- triglyceride and cholesterol levels reduced= *cardiovascular disease & stroke reduced*
- blood pressure reduced= *cardiovascular disease & stroke reduced*
- blood sugar reduced= *diabetes and cardiovascular disease reduced*
- ESR and CRP reduced= *inflammation reduced, pain reduced*
- White Blood Cells ACTIVATED: macrophages, neutrophils, monocytes, natural killer cells, T-cells, immunoglobulins all increased and enhanced= *immune activity pronounced*
- sodium levels decrease= *cardiovascular stress reduced, edema reduced*
- uric acid levels reduced= *gout and kidney stones reduced*
- liver enzymes reduced= *liver function enhanced*
- blood thins= *all vascular stress reduced, circulation and oxygenation enhanced*
- insulin reduced= *diabetes and cardiovascular disease reduced*
- bowel movements regulated 2-3 daily= *assimilation and elimination enhanced*

The change of physiology as seen above results in a change of chemistry which lowers inflammation in the body. I have seen these physical symptoms improve in my clinic with detoxification and fasting:

- weight gain and water retention
- food aversions, dislike for vegetables and healthy foods

- bowel irregularity, constipation, diarrhea, irritability and abdominal discomfort
- bloating, gas, heart burn and acidic stomach
- fatigue, weakness, listlessness, lack of motivation
- pain of muscles and joints – especially chronic pain from injuries
- headaches minor and major
- skin inflammation, rashes, outbreaks, chronic conditions
- chronic infections (yeast or bladder infections, sinus, respiratory, skin)
- swollen lymph nodes, enlarged glands, enlarged tonsils
- menstruation irregularity, excessive flow or pain
- men's prostate and bladder symptoms
- sexual libido and performance dysfunction
- allergic responses and chemical sensitivities
- detoxification of drugs, alcohol, caffeine or nicotine addiction
- inability to rest or sleep
- mood imbalance: restlessness, anxiousness, sadness, apathy
- memory lapses, lack of focus or attention
- body odor, bad breath, coated tongue, foul secretions



## Chapter 23

### The Scientific Studies Validate Fasting

The following is a list of conditions historically treated since the 1800's by physicians using water-only fasting. Most of these conditions are validated by dozens of research studies proving the effectiveness of fasting. If you want to research any of the following bulleted conditions put them in a search in the national database PubMed: <http://www.ncbi.nlm.nih.gov/pubmed> with the search queries ("caloric restriction" or "water fasting" + "condition below")

- obesity, especially abdominal obesity
- high blood pressure, chest pain (angina), early CHF
- coronary vascular disease- (atherosclerosis, elevated cholesterol and triglycerides) (to prevent stroke and heart attack)
- intermittent claudication, peripheral artery disease (circulatory disorders)
- hyperglycemia, hypoglycemia, Type 2 diabetes
- autoimmune diseases (acute glomerulonephritis, systemic lupus erythematosus (SLE), rheumatoid arthritis (RA), rosacea, chronic urticaria, psoriatic arthritis, ankylosing spondylitis, Hashimoto's thyroiditis, Sjogren's, mixed connective tissue disorders.

- intestinal diseases (IBS, constipation, diarrhea, inflammatory bowel disease: Crohn's and ulcerative colitis, gastric ulcers, appendicitis)
- fatty liver, cholecystitis, gallstones
- pancreatitis
- migraine headaches, common headaches
- skin conditions: hives, acne, eczema, psoriasis, fungal conditions
- pain: muscle and joint pain, fibromyalgia, sciatica, osteoarthritis, gout, injury
- allergies (food, topical and inhalant)
- asthma, bronchitis, chronic mucus/cough, sinusitis, sarcoidosis stage 1/2
- bladder infections, kidney infections, yeast infections, kidney stones, neurogenic bladder
- phlebitis, thrombophlebitis, varicose ulcers
- schizophrenia
- anxiety, depression, insomnia
- seizures, epilepsy
- neuropathy, undefined neurological symptoms
- cognitive function, Alzheimer's disease
- menopause symptoms
- iritis, retinitis
- periodontal disease
- pre-operative preparation and post-operative healing
- erectile dysfunction, prostate hypertrophy and related conditions
- benign growths (fibroids, lipomas, benign tumors, nasal polyps)
- chemical addictions (drugs, alcohol, nicotine, caffeine) and chemical exposures (especially PCBs and pesticides)

## Prolongs Life, Protects Against Wide Range of Health Maladies

Restricting caloric intake to 60-70% of normal adult weight maintenance requirement prolongs lifespan 30-50% and confers near perfect health across a broad range of species. We have observed health benefits starting in as little as two weeks, in insulin resistance, asthma, seasonal allergies, infectious diseases of viral, bacterial and fungal origin (viral URI, recurrent bacterial tonsillitis, chronic sinusitis, periodontal disease), autoimmune disorder (rheumatoid arthritis), osteoarthritis, symptoms due to CNS inflammatory lesions (Tourette's, Meniere's) cardiac arrhythmias (PVCs, atrial fibrillation), menopause related hot flashes. We hypothesize that other many conditions would be delayed, prevented or improved, including Alzheimer's, Parkinson's, multiple sclerosis, brain injury due to thrombotic stroke atherosclerosis, NIDDM and congestive heart failure. *Med Hypotheses*. 2006;67(2):209-11.

### Longevity and Chronic Disease

Chronic fasting extends longevity by reprogramming metabolic and stress resistance pathways. Intermittent or periodic fasting protects against diabetes, cancers, heart disease, and neurodegeneration, while in humans it helps reduce obesity, hypertension, asthma, and rheumatoid arthritis. Thus, fasting has the potential to delay aging and help prevent and treat diseases while minimizing the side effects caused by chronic dietary interventions.

*Cell Metab*. 2014 Feb 4;19(2):181-92.

### Large Evidence Supporting Fasting for Wide Range of Diseases and for Prevention

There is large empirical and observational evidence that medically supervised fasting with periods of 7-21 days is efficacious in the treatment of allergy and atopic disease, rheumatic diseases, psychosomatic disorders, chronic pain syndromes, hypertension, and metabolic syndrome. Fasting can also be applied for preventing

diseases in healthy subjects. Various identified mechanisms of fasting point to its potential health-promoting effects, e.g., fasting-induced neuroendocrine activation and hormetic stress response, increased production of neurotrophic factors, reduced mitochondrial oxidative stress, general decrease of signals associated with aging, and promotion of autophagy.  
Forsch Komplementmed. 2013;20(6):434-53.

### Hypertension, Elevated Lipids, Elevated Blood Sugars

In my own clinic, when putting our patients on *Nature's Detox*, it is very common to see the systolic blood pressures drop 20-40 points following the fast and dietary regime. This is more effective than many medications. In fact many patients have significantly lower blood pressure just following the Vegan Diet Prep prior to even starting any of the detoxification programs. These values will maintain healthy levels as long as the patient continues to eat according to the food plans outlined in this book. Dean Ornish found by reducing the fat in the diet from 40% to 10% and modeling more closely our ancestor's diet of approximately 20% fat he was able to produce the same results. Besides clinical observation, studies also validate that fasting lowers blood pressure, reduces lipids like triglycerides and cholesterol, and reduces glucose and insulin therefore eliminating the most common risk factors for heart attack and stroke.  
Srp Arh Celok Lek. 2007 Jul-Aug;135(7-8):440-6.

The following studies demonstrate the treatment effectiveness of reduced caloric intake (fasting) on specific health conditions. Here is a study published by Dr. Alan Goldhamer, founder and director of the fasting clinic True North in Santa Rosa, California.

### Stage 3 Hypertension

174 patients with high blood pressure on medication with an average BP of 160/100 mm Hg. The treatment program consisted of a short

pre-fasting period (approximately 2 to 3 days on average) during which food consumption was limited to fruits and vegetables, followed by medically supervised water-only fasting (approximately 10 to 11 days on average) and a refeeding period (approximately 6 to 7 days on average) introducing a low-fat, low-sodium, vegan diet.

Almost 90% of the subjects achieved blood pressure less than 140/90 mm Hg by the end of the treatment program. The average reduction in blood pressure was 37/13 mm Hg, with the greatest decrease being observed for subjects with the most severe hypertension. Patients with stage 3 hypertension (those with systolic blood pressure greater than 180 mm Hg, diastolic blood pressure greater than 110 mm Hg, or both) had an average reduction of 60/17 mm Hg at the conclusion of treatment. After 6 months, the group still on the diet had retained nearly the same improvement as before. All of the subjects who were taking antihypertensive medication at entry (6.3% of the total sample) successfully discontinued the use of medication.

J Manipulative Physiol Ther. 2001 Jun;24(5):335-9.

### Atherosclerosis and Heart Disease

Patients fed 1100-1900 calories compared to those eating 2000-3500 calories had total lower cholesterol and LDL as well as glucose, insulin and CRP with a coinciding high level of HDL. Their triglycerides were in the ultra-healthy level of top 5<sup>th</sup> percentile of 20 YEAR OLDS as well as 40% less carotid wall thickness. *Long term calorie restriction reduces risk for atherosclerosis in humans.* Proc Natl Acad Sci 4-27, 2004.

### CASE STUDY of Heart Disease

69 year old 182 pound male with history of diabetes, hypertension, elevated cholesterol, chest pain (angina) and one prior myocardial infarction (heart attack). He was on Rx: Tenormin, Lopid, Orinase,

Nitro patch and even had 175 treatments with intravenous EDTA chelation and still suffered from chest pain. After a vegan diet and a 19 day water fast his weight dropped 31 pounds to 151 pounds. He was off all his meds, he was no longer diabetic, hypertensive, nor had any chest pains. *Fasting and Eating for Health*, Joel Fuhrman, ISBN-10: 031218719X

### CASE STUDIES of Elevated Cholesterol and Triglycerides

59 year old male preliminary lab tests showed elevated values of total cholesterol at 234, triglycerides at 163, LDL at 134, and HDL at 67. After 7 day fast and only 1 month of dietary protocol total cholesterol dropped to 190, triglycerides to 34, LDL to 90, and HDL increased to 93. *Case study patient of Dr. Iverson*

65 year old male with preliminary lab tests showed elevated values of total cholesterol at 234, LDL at 158, and cholesterol ratio at 3.84. After a 14 day fast and only 1 month of dietary protocol total cholesterol dropped to 152, LDL to 79, and cholesterol ratio dropped to 2.9.

*Case study patient of Dr. Iverson*

### Heart Disease, Breast Cancer, Potent Anti-inflammatory

Limited calorie restriction studies in humans have shown promise in reducing the incidence of heart disease and breast cancer. The combination of calorie restriction and omega-3 fatty acids may be the more important antiinflammatory intervention than either regimen alone.

*Curr Opin Clin Nutr Metab Care. 2005 Jul;8(4):382-7.*

### Autoimmune Uveo-retinitis, Anti-inflammatory

The severity of autoimmune uveoretinitis was milder in the restricted diet group than in the control group. Production of inflammatory molecules interferon-gamma (IFN-gamma) and tumor necrosis

factor-alpha in draining lymph node cells was significantly lower in the restricted diet group than in the control group.

Jpn J Ophthalmol. 2001 Jan-Feb;45(1):46-52.

### Auto Immunity, Allergy, Intestinal Permeability

Autoimmune diseases such as glomerulonephritis, chronic urticaria, rosacea, systemic lupus erythematosus (SLE), colitis, rheumatoid arthritis (RA) and fibromyalgia (FM) show improvement in labs (decreased ESR) and symptoms during a short (7 day) water fast. Speculation of food allergies or intestinal permeability associated with autoimmune diseases.

Rheum Dis Clin North Am 1991 May; 17(2):363-71.

Multiple autoimmune conditions have been treated with water fasting as written in volumes of journals (see individual searches in pubmed.gov).

### Rheumatoid Arthritis

We reviewed thirty-one studies that indicate positive effects with fasting followed by a vegetarian diet in patients with rheumatoid arthritis. The pooling of these studies showed a statistically and clinically significant beneficial long-term effect.

Scand J Rheumatol. 2001;30(1):1-10

The study showed that under a low energy fasting-type diet a reduction of disease activity in rheumatoid arthritis was accompanied with a reduction of the urinary pentosidine.

J Physiol Anthropol Appl Human Sci. 2004 Jan;23(1):19-24

A U.S. study of 43 patients with rheumatoid arthritis found significant improvements in grip strength, pain, swelling of proximal interphalangeal joints, ESR, and functional activity after a water fast of 7 days. Clinical Ecology 1984;2 : 137-144

### Atopic Dermatitis

24-hour fasting was conducted once a week for a period of 20 weeks. No medication was administered during the trial period. At the end of the trial, body weight was reduced and clinical symptoms improved.

J Physiol Anthropol Appl Human Sci. 2003 Sep;22(5):237-40

### Appendicitis

Conservative treatment is usually antibiotics. This patient denied surgery and antibiotics and was able to heal the condition by treating with a water-only fast and proper diet follow up. The study summarizes fasting is effective for uncomplicated appendicitis.

J Altern Complement Med. 2011 Mar;17(3):275-7

### Epilepsy

Fasting has been used to treat seizures since the early 1900's to decrease duration, severity and number of episodes by inducing ketosis. A modified ketogenic diet resulted in seizure-free patients after the 20<sup>th</sup> day and continued for six months without adverse effects.

No To Hattatsu. 2011 Jul;43(4):305-8.

Also shows favorable application with intractable child epilepsy.

Brain Nerve. 2011 Apr;63(4):393-400.

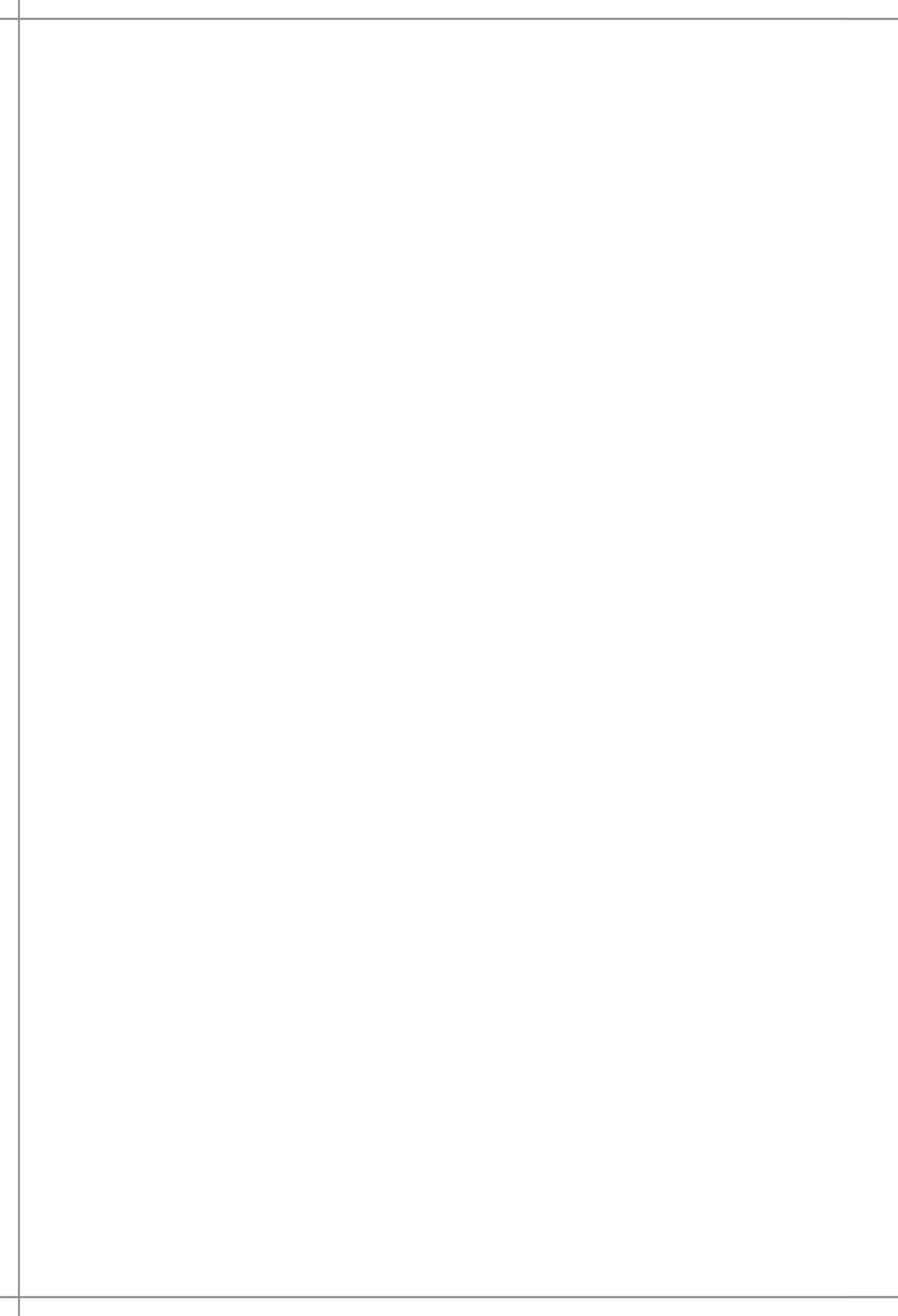
### Obesity

A man weighing 456 pounds under the close guidance of physicians, water fasted for an extraordinary 382 days. The patient's weight decreased from 456 to 180 pounds and even five years after the fast, the patient's weight remained 196 pounds.

Postgraduate Medical Journal (March 1973) 49, 203-209.

Although fasting is very effective for weight reduction, fasting alone, without counseling and other lifestyle modifications, does not ensure long-term weight loss. This fact is well documented in a study of 121 obese patients who were monitored for 7.3 years after fasts that had averaged 2 months. After 2 to 3 years, 50% of patients had returned to their prefast weights, and by the end of the study, 90% weighed the same as before their fasts.

*Textbook of Natural Medicine; Pizzorno, Murray*



## *Chapter 24*

# **Nature's Great Healer: How Fasting Works Your Body Eats Itself to Bring Wellness**

**F**asting is a common phenomenon seen in Nature. Hibernating animals, spawning fish, migrating birds and parenting penguins can go weeks if not months sustaining only on their reserve fat tissues. Thus, going without food for extended periods is considered a safe and essential cycle for many animals. Fasting is also the most natural healing approach taken by Nature when an animal falls sick or wounded. Their natural instinct is to stop eating which allows their digestive system to rest and their body to focus on the illness. Humans have lost this innate sense to fast during illness. Instead we feed ourselves not only when we are feeling well, but also when we are sick or injured.

Some consider fasting to be synonymous with the word “starvation” although they are two very different processes. Fasting is the abstinence of all food except water, where there is the intent to undergo the fast for health or spiritual purposes. Under proper conditions it is a very beneficial tool to treat numerous health related issues. Starvation on the other hand is a non-voluntary process with an entirely different mental state attached; mostly the fear of not obtaining food. During starvation a deadly physiological process occurs as the body breaks down the vital tissues such as the muscles, heart, glands, and nerves for survival fuel. Only when

the human animal fasts in a state of complete rest can they avoid the dangerous mechanisms of starvation.

During this rest the entire body including the digestive system can take pause to heal. Manufacturing complex proteins to form digestive enzymes and utilizing them to break down food into simple molecules requires a lot of work and energy by the body. However, after resting from food for about 10-12 hours these enzymes can be redirected to clear the bloodstream of inflammatory proteins. (This is why the 8 hour window is so important.) Here in the blood these digestive enzymes clean up wastes like undigested food molecules, dead cells, protein wastes, and low grade infections of bacteria, viruses, fungi and parasites. These enzymes also have fibrinolytic activity and clear excess fibrin, a clotting protein from the blood. This thins the blood and is the one mechanism by which circulation is improved and benefits cardiovascular and circulatory disorders. This is where a powerful “cleansing” takes place; the enzymes that would usually be breaking down food in your digestive system are now breaking down and removing wastes in your blood stream.

As the fast continues the body’s fuel requirements will also increase. The body needs to get its energy from somewhere so it switches to another source of fuel to preserve life. The body turns now to its own tissue stores for fuel, that’s right- it begins to eat IT’S OWN SELF! This process is called “autolysis” as the body breaks down its own cells with its own enzymes. However, it doesn’t just eat itself haphazardly. The body inherently recognizes the importance of preserving the most “essential tissues” like glands and nerves and thus will first break down what is considered “non-essential” tissue for fuel.

One primary source of this “non-essential” tissue is quite abundant in the average American; it’s called FAT. Cellulite, love handles, spare tires are just a few ways the body stores fat or adipose tissue. In some people it stores fatty lipids in the blood as triglycerides, in the liver as a “fatty liver” and inside artery walls as a fatty plaque called atherosclerosis which can form a blockage resulting in a heart attack or stroke.

One can imagine the benefits of fasting as the body “self-eats” its own fat at approximately 1 pound daily. Not only do we lose the fat on our bellies, the body removes fatty plaques lining our vessels and promotes blood flow to previously clogged arteries. As this arterial fat is released the blood cholesterol and triglycerides levels will rise dramatically at first and then will fall to lower levels once the fats are cleared by the liver. This is the second mechanism that improves oxygen and blood circulation and protects against heart disease and stroke.

In Dr. Joel Fuhman’s book *Fasting and Eating for Health*, he explains how patients avoided bypass and even reversed heart disease through diet and fasting alone. It’s unimaginable that more than 500,000 bypasses are performed each year in the USA and could potentially be avoided simply by abstaining from food, resting, and allowing the body to heal itself.

Wherever fatty tissue accumulates in the body, so too are fat-soluble toxins. As the fast liberates these storage fats, toxins like pesticides, PCBs, and dioxins are also released into the blood stream. In fact, fasting is one of the only methods that can actually remove these dangerous fat soluble toxins. (Note the study below how all these exposure patients’ symptoms improved with fasting.) Be aware that you should not jump immediately into a fast because toxin levels can rise 10 times higher than baseline and potentially harm the nervous system.<sup>1</sup> This is why it is so important to gradually work into a fast as I have instructed in this book and remove these toxic wastes slowly and efficiently in a safe manner.

#### Fasting: PCBs in the Taiwanese study

Sixteen patients in Taiwan poisoned by ingestion of a PCB contaminated rice oil were fasted for 7-10 days approximately 26 or 35 months after being poisoned. All these patients showed improvements of their symptoms including relief of headache, back pain, joint pain, foot pain, cough and acne. PCB concentrations in blood were rather elevated during and after the fasting. *Prog Clin Biol Res.* 1984;137:147-53.

The liver is our main ally to make sure that these wastes are removed after they have been released into the bloodstream. It transforms these fat soluble wastes and poisons into less harmful water soluble forms that can be more easily excreted. It does this through two phase systems of enzymes in the liver cells named cytochrome p450 enzymes. The phase I cytochrome p450 enzymes convert the toxic poison from fat soluble to water soluble so it is more easily excreted by the kidneys. The phase 2 enzymes add sulfur and use glutathione and other antioxidants to neutralize the poison before it is excreted in the urine, feces or sweat. All of us have different degrees and types of p450 enzymes.

Some people detoxify better than others because they are not as burdened with chemicals or because their liver is just more efficient. As a side note, it is worthy to remark here that babies in the womb and new born children do not have as efficient detoxification system to break down chemicals. Combine this weaker detoxification ability with a familial cytochrome p450 deficiency and we may have a reason why some children have reactions to vaccines which are known to be composed of multiple chemicals.

1) Environ Health Perspect. 2013 Feb; 121(2): 162–169

## Chapter 25

### **Dissolve Pain, Soothe Inflammation & Stimulate Immunity as the Body Eats Old Scar Tissue**

**B**esides breaking down the non-essential fat during fasting, the body also needs a certain amount of daily protein to make glucose for the brain. Instead of eating away at our essential muscle tissue, the body in its wisdom turns to the *damaged protein tissue* found in *scar tissue* or other *useless fibrous tissue* that is formed after an injury. The catabolism, or breakdown, of these non-essential tissue proteins is where many feel the “magic” of fasting is observed. As the body eats away this old fibrous scar tissue for glucose one begins to experience a greater range of motion and mobility and reduced or eliminated pain.

It is not uncommon during the height of the fast for a patient to complain about feeling inflamed all over. Maybe they feel a “flair” or pain with heat emanating from an old injury or surgery site. They are grateful to witness it resolve within a few days with much better function and mobility than before. For people who want to focus on these old injuries or scar tissues they need to attend a supervised medical fasting retreat to conduct a longer fast of 14-21 days or alternatively they can do this at home conducting dozens of intermittent fasts over the course of 12 months to years. (See Chapter 21 on repeating for intermittent fasting instructions.)

– Dissolve Pain, Soothe Inflammation & Stimulate Immunity  
as the Body Eats Old Scar Tissue –

Science hypothesizes that inflammation is the cause of all disease processes. As pain increases during a fast, inflammatory markers such as SED rate (ESR) and C-reactive proteins also temporarily increase, as if the body is becoming more inflamed during the fast (possibly from the release of stored toxins). As the pain improves and the fasting is concluded the markers come back down and typically at levels LOWER than they were before the fast! If inflammation is like a raging fire in the body- HOT and RED and BURNING –how do we put out that fire? With WATER: the Universal Solvent of Life. During the cleanse it is imperative to wash away the wastes anti-inflammatory properties of water

If you spend any time in the Advanced and Expert Levels your body will be sustaining almost entirely from burning the fat stores for energy. This process is called ketosis and it will be discussed more in Chapter 30 on the “Physiology of Fasting.” Ketosis has been shown to be the primary chemical mechanism that reduces the inflammatory states; specifically the ketone called BHB ( $\beta$ -hydroxybutyrate) which blocks inflammasome (also known as NLRP3: a molecule which promotes inflammation). NLRP3 is secreted in response to elevated urate crystals or uric acid as seen in gout. (Some scientists feel gout is an early predictor of chronic disease due to its inflammatory nature, hence gout, the disease commonly related to overeating, is greatly benefitted by fasting). *The ketone BHB also has a very specific effect in ONLY suppressing the undesirable inflammatory reactions and keeping the useful ones intact.* Other ketones produced during fasting like acetoacetate and the short-chain fatty acids butyrate and acetate were unable to suppress inflammation in this manner. <sup>1</sup>

Subsequently, cleaner blood and lower inflammation means a more efficient system and stronger immunity; but there are other specific immune events that occur. At first the white blood cell count reduces as the body eliminates older damaged and worn out cells through autolysis. It recycles the skeletons of these cells to be re-used for tissue repair and also for energy during the fast. As the white blood cells fall in the first 2-4 days of fasting, so do levels of insulin-like growth factor I (IGF-I: a hormone that is linked to

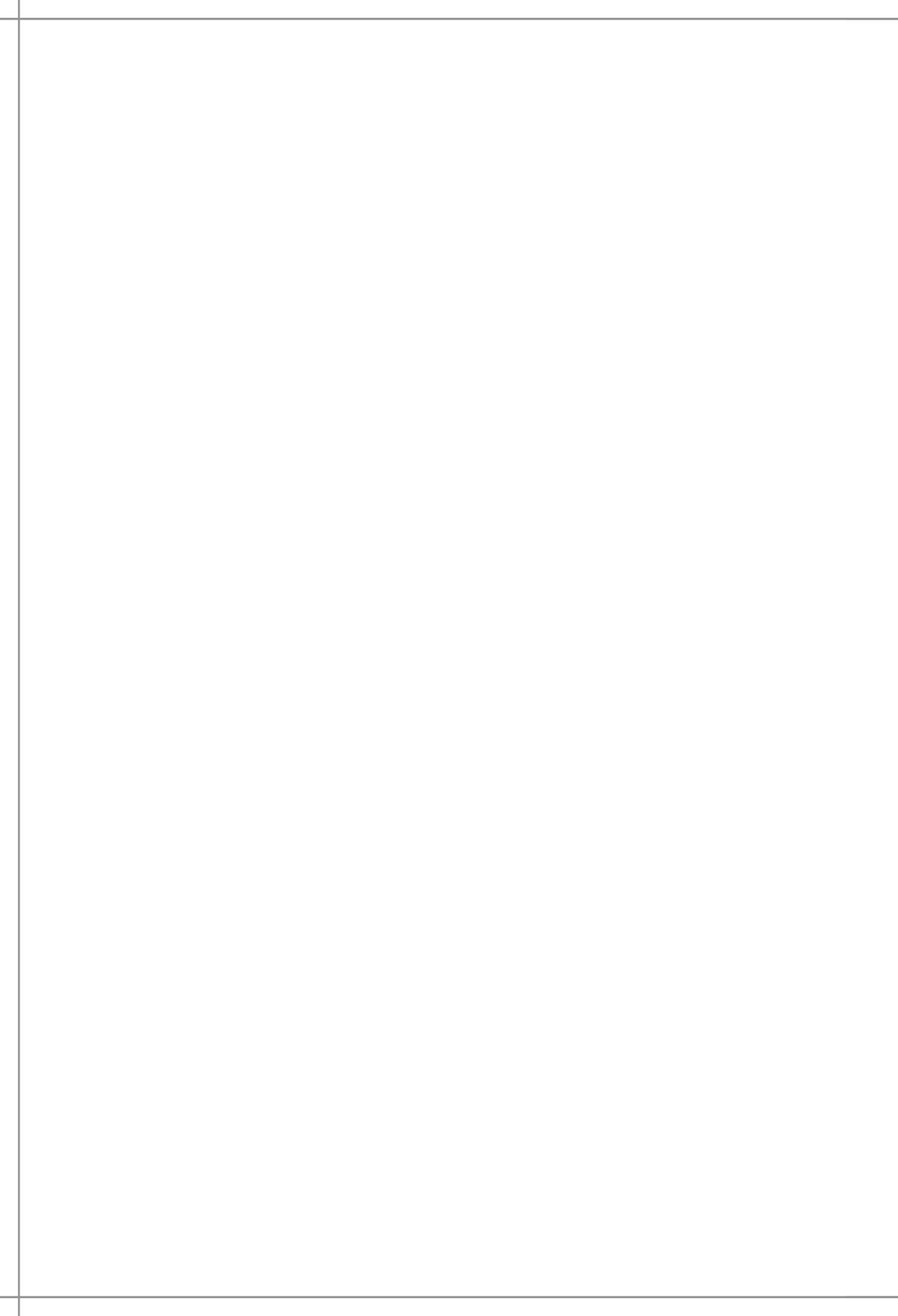
increased risk of tumors and cancer in fully mature adults) as well as the levels of the enzyme PKA (protein kinase A).<sup>2,3,4</sup>

As the PKA enzyme falls it then signals stem cells to go into regeneration and transformation mode. Stem cells are immature cells that have the ability to transform into any type of cell in the body (from a liver cell to a heart cell to a bone or blood cell) once they are signaled. PKA also causes macrophages, which are the white blood cells that eat invaders and debris, to be increased. T cells are increased and their communication methods are increased through lymphokines. Neutrophils are increased against bacteria and more immunoglobulins are produced and Natural Killer cell activity is enhanced. In this case fasting is literally exchanging out an old immune system for one that is much younger, healthier, and more effective against internal and external invaders.<sup>5</sup>

Dramatically reducing caloric intake and entering a state of ketosis therefore, has vast implications for all immune system conditions as it is a balancing mechanism. It can lower the elevated white blood cells as seen in infections and inflammation. It can raise the depressed white blood cells as seen with chronic infection and chemical toxicity. It even regulates the confusion of white blood cells as they attack the body in autoimmune conditions.

This impact of fasting is also being looked at in its implications with chemotherapy. Even though chemotherapy can be effective in some cases for cancer treatment, it causes significant damage to the immune system. With this process one could remove the immune cells damaged by the chemotherapy and replace them with new stem cells. One study showed that a three day fast prior to chemotherapy was beneficial but a one day fast was not effective in creating the immune response.<sup>6</sup>

- 1) Nat Med. 2015 Mar;21(3):263-9.
- 2) Aging Cell. 2008 Oct; 7(5): 681–687.
- 3) <http://news.harvard.edu/gazette/1999/04.22/igfl.story.html>
- 4) J Natl Cancer Inst. 1999 Apr 7;91(7):620-5
- 5) Cell Stem Cell. 2014 Jun 5;14(6):810-23.
- 6) Cell Stem Cell. 2014 Jun 5;14(6):704-5



## Chapter 26

# The Science of Why We Age

If we understand better what causes us to age and ultimately die, we can potentially prevent those causes and extend our own life. Physical aging leading to a natural death is proposed to occur through the following scientific theories:

- 1) Programmed Cell Death Theory: This says we are on a time table, as we progress chronologically certain genes begin to switch off, hormone production decreases (especially growth hormone and sex hormones), and immune function declines. These theories propose that we peak at puberty and then gradually decline from there. Our choices in food, exercise, and lifestyle habits can extend or decrease that expectancy.
- 2) Wear-and-Tear Theory: Another theory embraces that we age because our genes get damaged from environmental assaults and therefore it is a “wear and tear” phenomenon. Our cells are like an aging machine and break down from being used over time. Those organisms with a high rate of oxygen metabolism have a shorter lifespan. Mice that breathe 100-140 times per minute live 1-3 years while tortoises breathe 4 times a minute and lives up to 150 years.
- 2b) The Free Radical Theory is a part of the Wear-and-Tear Theory. This assumes that free radicals that are produced by the body, like hydrogen peroxide and superoxide, damage

*cells over time* if they are not quenched by antioxidants. Supplemental glutathione, and other antioxidants have shown to increase the lifespan of laboratory animals.

The wear-and-tear of cellular oxidation results in protein cross linking and a loss of collagen elasticity ultimately inhibiting cellular function. Nutrition assimilation decreases and waste products increase causing cellular congestion. The DNA is damaged and the cell is no longer able to repair itself by making the necessary proteins from messenger RNA. Therefore genetic mutations accumulate as we progress chronologically and the cell function deteriorates.

Wear-and-tear damage can be slowed by reducing exposure to toxic chemicals that oxidize and encourage cross linking and DNA damage. This means we must not only avoid these chemicals and improve their elimination, but we must also have a storage house of anti-oxidant “protectant molecules” to neutralize the toxins (as you will learn about in Chapter 48 on juicing).

- 3) **Telomere Theory:** Telomeres are structures found at the end of each chromosome acting to protect the chromosome from premature deterioration and mutations. They can be compared to the plastic at the end of shoelaces that protect the chromosomes from fraying or sticking together. Each time a healthy cell divides to make two new healthy cells the telomeres get shorter. When the telomeres reach a critically small length, the cell stops replicating, becomes inactive and eventually dies.

The following studies further demonstrate the extension of lifespan imparted by reducing calories or water fasting.

### Nothing Compares to Fasting

Calorie restriction through meal replacement or drinking water as a fast is the only experimental manipulation known to extend lifespan,

reduce the incidence of chronic disorders, (e.g. cardiovascular disease, diabetes, stroke, autoimmune disease and cancer) and balances neurological and hormonal function in animals.

Nat Rev Mol Cell Biol. 2005 Apr;6(4):298-305.

### Twice the Lifespan

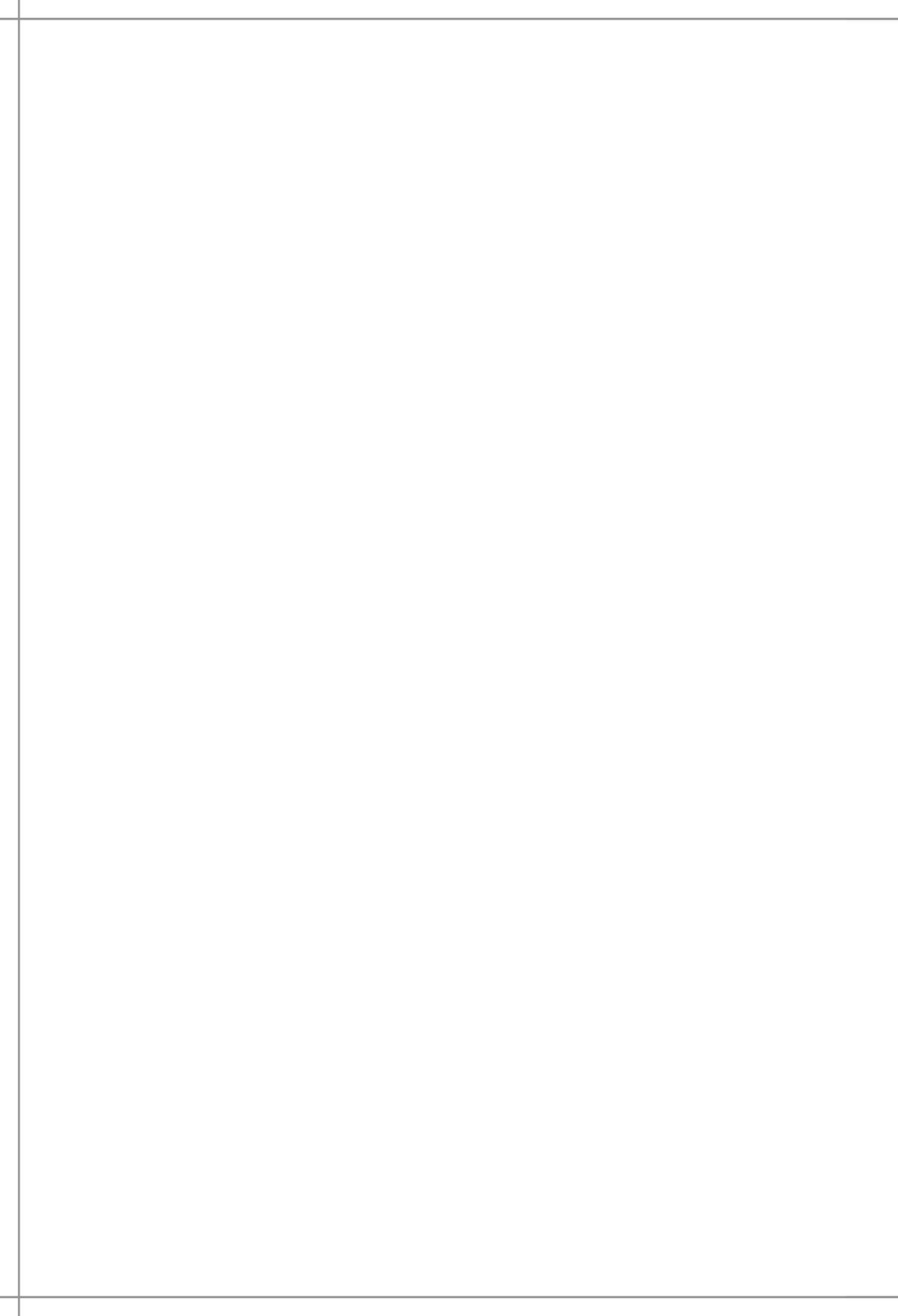
Laboratory rats fed a severely reduced calorie diet while maintaining micronutrient levels resulted in life spans of up to *twice as long* as otherwise expected. They found that the rats fed less calories lived longer, looked younger, and were more active than those who maintained standard diets.

*The Retardation of Aging and Disease by Dietary Restriction* (ISBN 0-398-05496-7)

### Incredible Findings in Regeneration and Disease Reversal

Prolonged fasting (PF) promotes stress resistance. In mice, given 4 days of a fast mimicking diet (FMD) and follow-up re-feeding showed to have an elevated number of progenitor and stem cells and regeneration. Bi-monthly FMD cycles started at middle age extended longevity, lowered visceral fat, reduced cancer incidence and skin lesions, rejuvenated the immune system, and retarded bone mineral density loss. In old mice, FMD cycles promoted hippocampal neurogenesis, lowered IGF-I levels and PKA activity, elevated NeuroDI, and improved cognitive performance. In a pilot clinical trial, three FMD cycles decreased risk factors/biomarkers for aging, diabetes, cardiovascular disease, and cancer without major adverse effects, providing support for the use of FMDs to promote health span.

Cell Metab. 2015 Jul 7;22(1):86-99.



## Chapter 27

### **Excess Insulin Reduces Lifespan. Fasting for Cancer, Alzheimer's, Parkinson's and "Dying From Any Cause."**

**I**nulin is a hormone produced in the pancreas and transports the glucose from your food into the cells to be utilized for energy. Insulin will convert any excess sugar it can't drive into the cells into FAT. This results in excess body weight and fat storage in the form of triglycerides and cholesterol. Only a small amount of insulin should be made after eating and then it should virtually come back to resting levels.

Because of today's diet high in concentrated fats and sugars, insulin is continually over-secreted and does not return to resting levels. This is called *insulin resistance* and causes elevated blood sugar and obesity, and can progress to diabetes, cardiovascular disease, cerebrovascular disease, as well as kidney disease, ocular conditions and neuropathy. New research now shows EXCESS INSULIN is associated with 16 TYPES OF CANCERS: COLORECTAL, ESOPHOGEAL, RENAL, BREAST, UTERINE, STOMACH, LIVER, GALLBLADDER, PANCREAS, OVARIAN, THYROID, MENINGIOMA, MULTIPLE MYELOMA, B-Cell LYMPHOMA, PROSTATE, and MALE BREAST CANCERS.<sup>1</sup> Thankfully, we all have available to us a simple and free treatment called *fasting* which is proven to reverse insulin resistance. Amazingly, reducing caloric

intake and fasting even prevents the progression of kidney disease caused by advanced diabetes.<sup>2</sup>

There is also clear association with insulin resistance causing the formation of beta-amyloid in brain cells resulting in Alzheimer's disease.<sup>3</sup> Case studies document how improved diet and short-term fasts lowered insulin levels and were able to significantly improve Alzheimer's symptoms in 9 out of 10 patients.<sup>4</sup> In fact, reduced caloric intake shows promise for a number of neurodegenerative conditions including Parkinson's disease<sup>5</sup> and Huntington's disease<sup>6</sup> as it promotes the growth of new nerve cells and increases levels of a brain hormone called "brain-derived neurotrophic factor" (BDNF)<sup>7</sup>. Fasting protects against depression<sup>8</sup> and is even showing promise to reverse the damage caused by strokes.<sup>9</sup>

Excess insulin has even been blamed for the woes of the aging male as it promotes an enlarged prostate and can result in impotence.<sup>10</sup> In fact, **elevated insulin is associated with increased mortality from ANY CAUSE (including accidents!)** showing that over a 10-year period, *the risk of dying was almost **twice as great** for those with the highest levels of insulin compared to those with the lowest.*<sup>11</sup> With this information we can see a major reason why fasting is considered to be the most valuable treatment modality to extend life: because it reduces insulin levels and makes them sensitive again.

So how could lowering your insulin levels reduce your risk of dying from ANY CAUSE- even an accident? After some research I did indeed find the answer I was looking for. It seems that excess insulin secretion has an excitatory influence on the nervous system by putting one in a "sympathetic" or "fight or flight" response. In a sympathetic state we are naturally more anxious, jittery, and over-excited due to the release of adrenaline. It also may make us more hyper and more tense or easy to anger. The fight or flight response in essence makes us want to "fight" or "run" and being in this state too long can easily make us more prone to accidents and poor decision making.

The fight or flight response also constricts the blood vessels of the extremities and the digestive system. This means decreased

oxygenation and decreased nutrition to the cells as well as decreased waste excretion.<sup>12</sup> Over time this would lower one's overall vitality and ability to heal from injury or survive a chronic disease state. Thus we can see two reasons an elevated insulin level can raise your risk of death from any cause. In our clinic we start to treat the patient for dysinsulinism when fasting insulin is over 5  $\mu$ IU/mL and glucose over 85 mg/dL on fasting or over 95 mg/dL approximately three hours after a meal.

Initially in the early stages (first few days) of a fast, the adrenal glands increase their output of stress hormones epinephrine (adrenaline), noradrenaline and cortisol to promote a burst of energy to find food. Both adrenaline and cortisol stimulate a breakdown of muscle proteins to provide quick energy in times of initial stress. However, this is not a desirable outcome when enduring a prolonged fast so the body reduces both adrenaline and cortisol output as the fast progresses. Reduced cortisol levels can speed the body's healing time as elevated cortisol slows healing time. As these cortisol levels fall during a longer fast, inflammatory or allergic symptoms can all "flair" since cortisol (like cortisone) inhibits allergic symptoms. Some common "detox" symptoms seen in fasts such as skin breakouts, painful joints, headaches, stuffy nose, mucus secretions and many others are due to the suppression of cortisol and elevation of inflammatory molecules.

With a longer fast, the lowered adrenaline, cortisol and insulin and inhibition of the "fight or flight" response may be one more key reason why fasting is so beneficial not just for the body but also for the mind and spirit. Reducing these stress hormones induces a calm and relaxed "Zen state" and the body physiology is more representative of someone in the state of peace and balance as seen in meditation and prayer (see the Mind and Spirit of Fasting Chapter 47). It's in these states that our physiology is most receptive to healing and miraculous cures. Literally, fasting makes us more open for genuine healing on physical, mental and spiritual levels.

- 1) *N Engl J Med.* 2016;375:794-798, *Biomed Res Int.* 2015;920618, *Diabetes Care.* 2010 Jul; 33(7): 1674–1685.
- 2) <http://www.ncbi.nlm.nih.gov/pubmed/17316625>
- 3) *Rev Diabet Stud.* 2006 Winter; 3(4): 161–168.
- 4) *Aging.* September 2014, Volume 6, Issue 9 pp 707—717, [www.aging-us.com/article/NjJf3fWGKw4e99CyC/text](http://www.aging-us.com/article/NjJf3fWGKw4e99CyC/text)
- 5) <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2622429>
- 6) <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC151440>
- 7) <http://www.ncbi.nlm.nih.gov/pubmed/11220789>
- 8) [www.ncbi.nlm.nih.gov/pmc/articles/PMC4790398/](http://www.ncbi.nlm.nih.gov/pmc/articles/PMC4790398/)
- 9) <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2844782>
- 10) *Eur Urol.* 2001 Feb;39(2):151-8
- 11) *Diabetes Care.* 2000 Aug;23(8):1097-102
- 12) *Med Hypotheses.* 2014 Jun;82(6):730-5

## Chapter 28

### Dwarfism, Growth Hormones and Obesity in Fasting

**O**ne of the most well studied hormones of fasting is somatomedin C, also known as insulin-like growth factor (IGF-I). This hormone rises and falls with insulin and its most important function is the promotion of childhood growth during puberty. A deficiency of this IGF-I in children results in a form of dwarfism called Laron syndrome. Interestingly, as a population, Laron syndrome dwarfs do not develop diabetes or cancer, even if they are obese. Some scientists feel the answer to this phenomenon lies in their low levels of IGF-I.

Fasting can replicate the same physiology as found in Laron syndrome. Fasting for 5 days resulted in a 50% decrease in IGF-I. Researchers found that not just the reduction of calories but also the absence of protein intake is what decreases IGF-I. Thus it may be deduced that lowering IGF-I through reduced protein intake diets and/or water fasting may also protect against the development of diabetes and cancer.<sup>1,2,3</sup> The research also found that even after returning to normal eating 25 days after a fast the IGF-I values can still remain as low as 20% below baseline.<sup>4</sup>

In relation, the hormone leptin is elevated in individuals with obesity. Fasting reduces leptin levels which in turn triggers the liver to secrete human growth hormone (HGH).<sup>5</sup> Increasing HGH levels signal the body to burn fat, build lean muscle and repair collagen

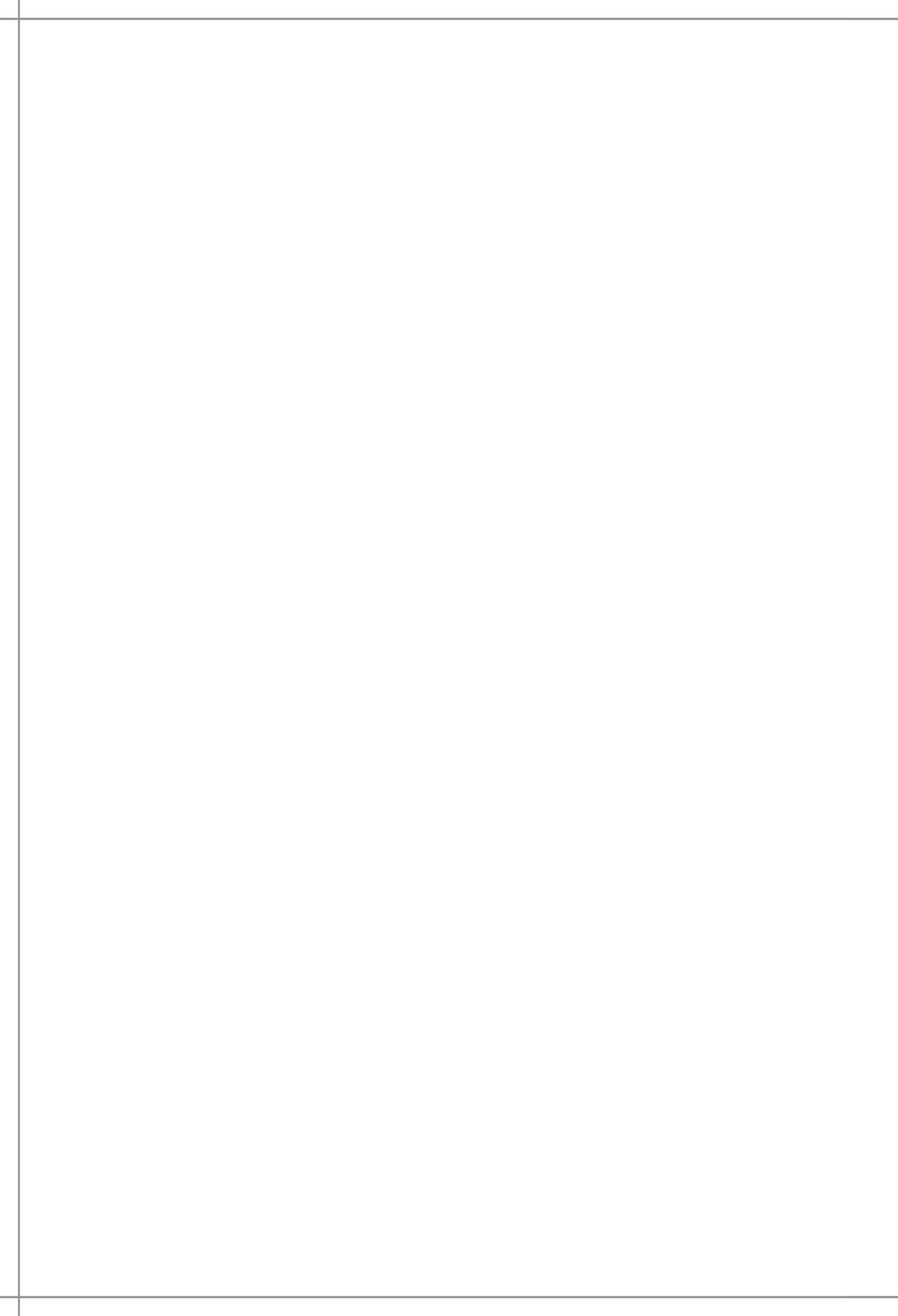
tissue which slows oxidation and aging. Growth hormone is at its peak when we are 30 years old and depletes as we progress chronologically. So even though fasting can cause some tissue loss, growth hormone can increase as much as five fold and acts to neutralize this effect and rebuild some of what is being lost in the breakdown.<sup>6</sup> Leptin levels have not been shown to rise again after fasting unless an unhealthy diet is resumed. This means absolute magical results for someone serious and dedicated to long term weight loss; reducing leptin literally reduces obesity!

Although fasting is clearly very effective for weight reduction, fasting alone, without counseling and other lifestyle modifications, does not ensure long-term maintenance of the lower body weight. This fact is well documented in a study of 121 obese patients who were monitored for 7.3 years after fasts that had averaged 2 months. After 2 to 3 years, 50% of patients had returned to their pre-fast weights, and by the end of the study, 90% weighed the same as before their fasts.<sup>7</sup> This makes it so clear why fasting is not a quick weight-loss fix. You will have to adopt a healthy way of eating for the rest of your life and choose *Nature's Detox* a couple times a year minimum in combination with *Nature's Diet* as a standard of living.

Think of changing these hormone levels with water fasting similar to hitting the “reset” button for the body. It resets taste buds so natural food tastes good again. It resets the satiation mechanism so the body can feel true hunger as opposed to crave food all day. It resets digestion to digest and assimilate and eliminate food more effectively. It resets metabolism through insulin, IGF-I and leptin regulation promoting proper storage and combustion of fat. It resets immune activity by replacing an entire white blood cell colony of old cells with new cells from stem cells. It resets glandular and nervous system function supporting hormones and reducing fight or flight stress and making one more calm and peaceful.

- 1) <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2673798/>
- 2) [http://www.cell.com/cell-metabolism/fulltext/S1550-4131\(13\)00503-2](http://www.cell.com/cell-metabolism/fulltext/S1550-4131(13)00503-2)

- 3) Cell Metabolism Volume 19, Issue 2, p181–192, 4 February 2014
- 4) <http://www.bbc.com/news/magazine-25549805>
- 5) J Clin Invest. 1988 Apr; 81(4): 968–975
- 6) <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2673798/>
- 7) JAMA.1964 Jan 11;187:100-5



## Chapter 29

### Satisfaction versus Addiction Why You like Potato Chips

**O**ur body has built-in mechanisms that tell us when it's time to eat and when we are full. As we are all aware of, when we go too long without eating we experience “hunger pains” and a desire for food. These are triggered by low blood sugar levels and a secretion of the “hunger hormone” *ghrelin* from the gastrointestinal cells. These rumbling hunger pains are contractions of the stomach when it is empty and occur more often and more intensely in young healthy people and less often as we increase with age. From a natural perspective this is significant in telling us that reducing food intake is more beneficial during our later, non-reproductive years. Fasting is not as necessary for the healthy youth with strong digestive capacity and immune response.

As we chew our food and the saliva enzymes begin the process of digestion in the mouth, the brain receives messages regarding the quality of the food whether it is sweet, sour, salty, bitter, or pungent and what are the food's nutritional components. As one continues to eat, the food fills the stomach and activates the “stretch receptors” within the stomach walls. This stretching sends a message to the brain via the vagus nerve indicating the extent to which the stomach is filled. The vagal nerve fibers within the stomach also send messages to the brain regarding the food's macronutrient contents of carbohydrates, fats and proteins.

As the food is mixed with hydrochloric acid and the enzyme pepsin secreted by the stomach, it is digested and absorbed into the blood stream. The brain then receives even more detailed information about the caloric and nutrient content of the food. Blood sugar levels rise and the hormone insulin is released from the pancreas to push the glucose into the cells for utilization. Also at this point cholecystokinin (CCK) is released from the cells in the GI tract to stimulate the gallbladder to secrete bile and the pancreas to further release its enzymes trypsin and chymotrypsin. (Interestingly the pancreas is primarily a digestive gland and secondarily a sugar regulating gland.) The bile and pancreatic enzymes further digest the food and promote its absorption into the blood stream. As insulin and CCK levels rise they act as feedback signals to the brain that the need for food has been satisfied, a state called SATIETY.

CCK and insulin are short term satiety markers while the hormone leptin determines longer term satiety. Leptin is secreted by the fat cells and sends a message to the ventromedial nucleus of the hypothalamus regarding the body's total energy stores. High levels of leptin turn off the desire for food and low levels causes a constant craving for food. Leptin levels are higher in people with a high number of fat cells (obesity) and they are also associated with high levels of insulin. Ironically, in obesity, even though the leptin levels are high, the body no longer responds to them. In these cases, leptin has been over-secreted for so long that the body becomes insensitive to it just as overweight people are insensitive to insulin. In a healthy individual, after hours of not eating, leptin naturally drops which then triggers the secretion of the hunger hormones, ghrelin, glucagon and epinephrine to stimulate a sensation of hunger. Hence, the main purpose of leptin is to alert the body to “find food” and store it as “fat.” In this way both insulin and leptin are survival hormones that protect the body against the loss of energy during times of fast or famine.

The ability for the body to interpret the amount of calories in a given food was particularly important for the survival of humans

in times we used to live off the land. A meal high in fat, like that in meat, would be much more desirable by prehistoric man than eating a meal of green leafy plants which is low in caloric energy. The body has a natural inclination to desire food that will give it the most energy. This innate desire is still present in us today and is responsible for our choice of foods even though we no longer roam the land. The difference is today we have such an abundance of food but our brain still drives us to choose the foods that are “highest” in energy just in case we go back into famine.

Potatoes may only be about 500 calories per pound but potato chips are 2500 calories per pound. If someone is hungry and given the option between a baked potato or a handful of potato chips, most people would decisively choose the chips over the dry potato to curb the hunger. It’s actually an unconscious decision made by our brain to choose the food highest in calories to protect us from famine. Therefore hamburgers and French fries are much more appealing to most people than eating traditional healthy foods like fish and rice because they are much higher in calories. It is the main reason that McDonald’s and other fast food is rapidly taking over the dietary choices of our young people around the world. It simply comes down to a scientific explanation: the brain interprets high fat food as being a better “survival” food.

This explanation of satiation and appetite stimulation is very important to understand as you begin to refeed after the fast or cleanse. Because of these natural survival mechanisms your body is going to be innately driven to want to eat the most nutrient dense, high caloric food as soon as possible to build yourself up after not eating. With vegetables being approximately 100 calories per pound and proteins and carbohydrates equaling about 1800 calories per pound and fat being about 4000 calories per pound, it is clear that your body will be dying for that pepperoni pizza instead of obediently breaking the fast slowly with salads and raw vegetables as instructed. Breaking the fast is the most important part of the entire *Nature’s Detox*. This is when it is most important to have discipline and chew slowly,

always have healthy food available ready-to-eat and then have focus to allow the body several days to become adjusted to this new set point.

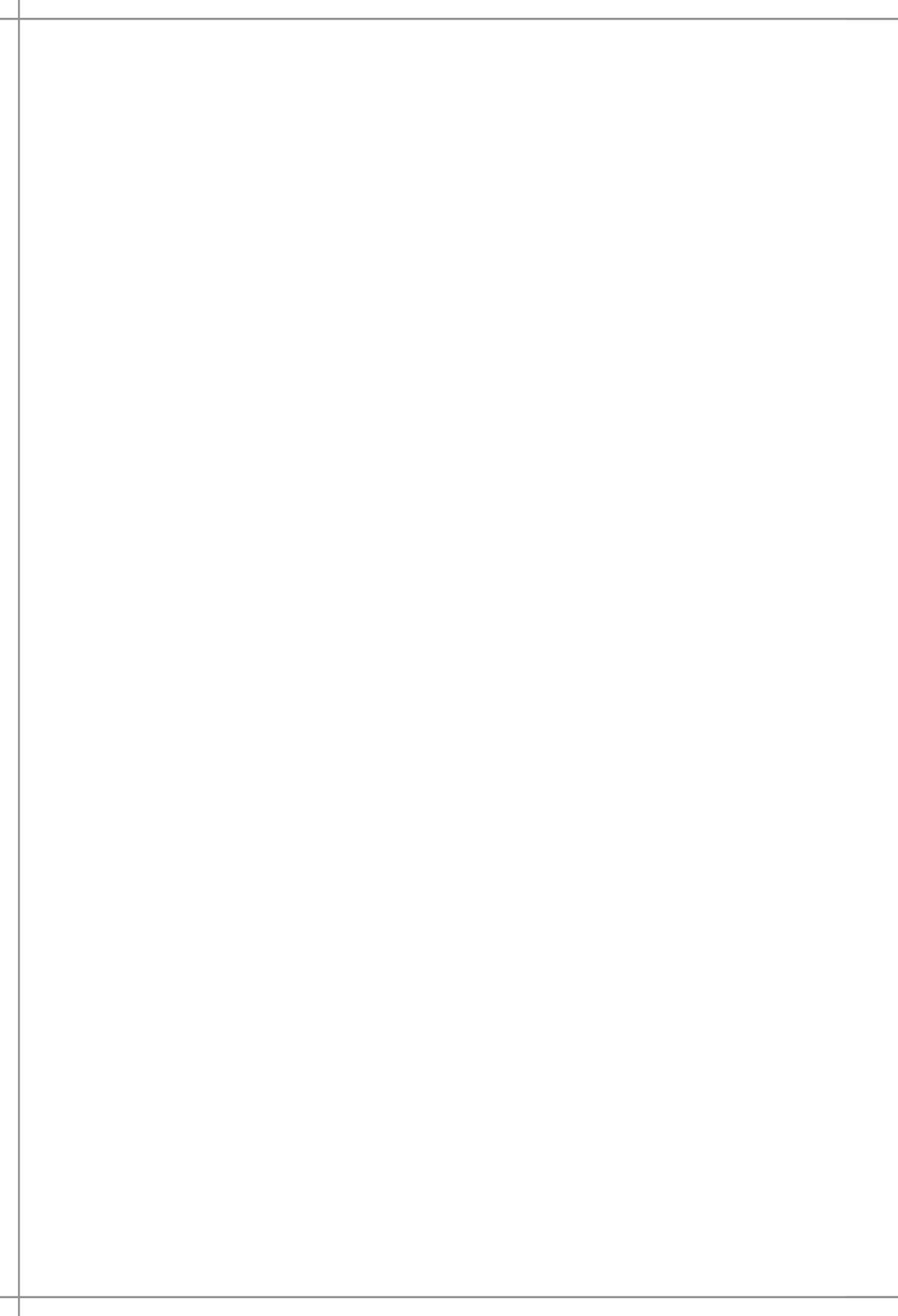
Besides signaling hunger and satiation, food can also trigger dopamine pathways in the brain that are associated with pleasure or “addiction.” Prehistoric humans survived by being attracted to what was pleasurable to the senses (the smell of ripe fruit) and being repelled by that which was unpleasant or painful (the smell of rotten meat or the pain of eating something with stickers or a bitter poison). These “pleasure seeking- pain avoiding” responses shaped humans through trial-and-error over generations and generations until it made us who we are today.

The pleasant feelings one receives when sitting in the warm sun, falling in love, smelling flowers, eating pleasurable foods, having sex, or getting a good night’s sleep are “felt as pleasurable” because of the neurotransmitter dopamine is being released in the limbic system of the brain. This same pathway is what is stimulated by cocaine, nicotine, caffeine, alcohol and all other addictive substances. During a cleanse however, this dopamine pathway becomes depleted and is not able to signal as before. It is stimulated again only if unhealthy foods are reintroduced into the body without breaking the fast properly (as also seen with leptin and insulin).

In my professional opinion, I feel many addictions are worsened by a nutritional deficiency affecting the communication of neurological pathways in the brain. This affects the ability of the nervous system and brain to respond to the world properly physically, mentally, and emotionally. Add this nutritional deficiency to a lifelong history of emotional challenges and you have a recipe for addictive brain chemistry. I feel that fasting is one of the very best medicines for people struggling with addictions. When taking only water, the desire for food outweighs any other desire and thus makes quitting so much easier than other methods.

Reintroduce your foods properly, as I have instructed in this book, and you will create new pleasurable dopamine connections to healthy foods. Your brain will be rewarded with simple pleasures

like the fragrance and taste of a ripe melon or the indulgence of a creamy avocado becoming a mouthful of heaven. You'll be surprised how your old cravings for chocolate, ice cream, fried chicken and soda pop no longer drive you as they had once before.



## Chapter 30

### The Physiology of Fasting

**S** **tage One:** Because no food is being consumed, the body needs to find other sources of fuel. The muscles, heart, liver and other organs can utilize fatty acids for energy, however the brain depends on *glucose* to function properly. When glucose levels drop due to inadequate intake, the body has a fallback mechanism to “make glucose” from its own protein stores. This is called GLUCONEOGENESIS and it is the first stage of “fasting” or response to decreased glucose. At this primary stage the majority of the glucose (64% of the brain’s need) is provided, unfortunately, by breaking down muscle tissue and turning these amino acids into glucose. The rest of the brain’s needs (36%) come from breaking down *glycogen*, a concentrated glucose molecule which is stored in the liver and the muscle tissue. The breaking down of glycogen to make glucose for the body is called GLYCOGENOLYSIS. The body in its infinite wisdom, for some reason, initially chooses to convert the protein in muscle tissue as its primary way to make glucose instead of going to our fat stores first. This all happens during the first 6-22 hours of fasting and can account for about 2-3 oz of protein muscle loss (60-84 grams). This muscle wasting can be more significant if you are active; so my teachers have always recommended COMPLETE REST during fasting.

**Stage Two:** By day 2 the body runs out of glycogen to turn into glucose and it cannot continue to breakdown the muscle tissue to

convert from gluconeogenesis or it would endanger the organism. Therefore the second stage is called the “protein sparing” stage or KETOSIS. In this stage the *insulin* levels fall to nearly zero (because glucose is what causes insulin to rise). Insulin falling is a good thing because insulin tells the body to STORE FAT! For the individual who has elevated insulin levels they will often have excess fat storage, especially excess belly fat, and they often have elevated blood sugar or low blood sugar episodes.

These falling glucose and insulin levels cause the liver to send the message “I’m out of glycogen” and in response produces a molecule called *glucagon* which flows through the blood stream and activates the enzyme *lipase* in the fatty tissue. This begins the shift in energy to ketosis as the body turns to the fat stores for energy (“yay” I hear you saying). This process is called *lipolysis* - or “splitting of the fat”. Lipolysis releases triglyceride molecules from the adipose fat stores one by one and are they are broken down into two parts: *fatty acids* and *glycerol*. (If you have high triglycerides prior to your fast it’s likely caused from a diet too high in sugars promoting excess insulin and fat storage.) As lipolysis breaks the triglycerides from the fat deposits their levels in the blood will rise (they will fall to healthy levels a month after healthy eating). When glucagon is released so is a small amount of epinephrine (adrenaline) which supports the action of glucagon in the liver as well as converts more glucose from glycogen in the skeletal muscles. This extra adrenaline burst in the early stages of fasting is adaptive. It raises the metabolic rate and gives the body just enough energy to get out and find food and may cause some people to feel wide awake after a few hours of sleep.

The fatty acids are sent to the muscle cells, skeletal cells, heart cells, and organ cells of the body where they can be used “as they are” for fuel. The glycerol molecule however needs to be converted into glucose and some fatty acids will also be converted into “KETONE BODIES” known as *acetoacetic acid* and *beta-hydroxybutyric acid* (BHB) and *acetone*. The first two are converted into *Acetyl Coenzyme A* and sent back into the cellular mitochondria where they enter the *Krebs Cycle* to be turned into ATP. The byproduct is *acetone* which

makes a person in a state of ketosis have a sweet fruity-like acetone scent on the breath. The brain would prefer to utilize real glucose for its energy, however if it continued to break down protein via gluconeogenesis it would quickly eat up all the muscle tissue in the body and the person would die. As a survival mechanism the body instead turns fat into ketone bodies to make ATP for the brain. The ketone BHB is the molecule recognized as having the beneficial properties in reducing inflammation during a fast.

Even despite this switch over to ketosis for energy, the body still needs a small amount of real glucose so it will still catabolize approximately  $\frac{1}{2}$  - 1 oz (18-24 grams) of “non-essential” protein daily. This is where the magic of fasting comes into play. The body selectively chooses to break down tissues that are non-essential to life such as *worn out cells*, *scar tissue* and *non-malignant growths* (as previously mentioned in Chapters 25 & 26). This is why a fasting individual will often experience a “retracing” or a re-emergence of symptoms or pain in old injuries as the body begins to eat away that scar tissue for glucose. This “stage 2” phase continues for the first 7-9 days of fasting, which means an additional 3-7 oz (70-170 g approximately) of non-essential tissue can be consumed. Again, complete rest is required to not burn excess healthy muscle protein reserves. Interestingly, during ketosis the desire to eat drops, the energy tends to balance, the mind tends to be clearer and the tongue will often be heavily coated as the body breaks down old cells and liberates wastes.

**Stage Three:** The final stage is called COMPENSATED KETOACIDOSIS and it is the complete shift of solely breaking down adipose tissue as a ketone fuel source for the brain. The brain no longer utilizes glucose at all; only ketones that are broken down from fat storage. This begins at about day 7 and continues until the fast is terminated. During this time the body reaches its peak of fat tissue breakdown and functions exclusively on ketones and fatty acids. The fat loss can be as high as  $\frac{1}{2}$ -1 pound of pure fat per day or approximately 1700-3500 calories! The ketone bodies are acidic and they have to be buffered by *alkaline bicarbonate* ions found in the

blood. The body will then expel this extra acidity through breathing more rapidly exhaling the byproduct *carbon dioxide*. When the buffer runs low ketoacidosis (metabolic acidosis) will be present and the pH of the blood will drop and be reflected in the urine as it excretes the excess acidity.

**Stage Four: DANGER!** This is known as the starvation stage because the body has run out of non-essential proteins to use as glucose for the brain and turns to vital tissues. This results in a catabolism of muscles, organs, and the nervous system and brain itself. Obviously this is very bad and would occur about 30-40 days into a fast depending on the fat stores and muscle mass of the individual. Fasting should never be carried out to this point.

## *Chapter 31*

### **Lab Values During Fasting**

**T**his page is reserved for the medical professional who wishes to track their patient on a medically supervised fast. Fasting is not a process to carelessly undertake. If you are considered a healthy individual and have none of the contraindications as listed in Chapter 7 then electrolyte water fasting as instructed in this book is possible **ONLY** under complete rest and no longer than 3-5 days. Continuing longer than this or fasting with any of the listed contraindications will only be advised under the guidance of a medical professional supervising your blood labs and monitoring your vital signs. It is important to draw blood before beginning the Vegan Diet Prep and then every 5 days during water-only fasting. To see the impact the detox and fasting has had on your lab values, take blood labs again 6 weeks after concluding the cleanse and maintaining a clean diet.

#### **Common Lab Values During Fasting:**

- Salt loss: during early fasting the body loses 150 to 250 mEq (3.5-5.8 g) of sodium and 40 to 45 mEq (1.6-1.8 g) of potassium a day; later, these values drop to 1 to 15 mEq (0.02-0.35 g) and 10 to 15 mEq (0.4-0.6 g). This results in a mild decrease in serum electrolytes- **SEE BELOW** under **URGENT**

- Blood glucose drops low for most patients (45-65 mg/dL) and normalizes after fast
- Cholesterol and triglycerides increase and then normalize at lower levels after fast
- Uric acid levels rise secondary to initial protein breakdown (increase water intake to prevent rare gout or kidney stone occurrence).
- Liver function values tend to rise mildly (ALT, AST, LDH, bilirubin)
- Iron levels decrease, and the red blood cells may drop during this time.
- Hgb, Hct, RBC (BUN + Hgb elevation together) all raise with dehydration= DRINK WATER
- WBC are stable or drop, can also elevate if initially low or if infection contracted
- ESR/CRP increases with fasting and decreases post fasting
- Blood thins: pro time increases
- Total protein decreases as could serum BUN and creatinine decrease
- Pancreatic enzymes decrease
- Insulin, insulin-like growth factor (IGF-1), leptin and thyroid hormone decreases (thyroid hormone increases again with ketosis)
- Growth hormone, glucagon, norepinephrine, melatonin increases
- Adrenal hormones: adrenaline, noradrenaline, cortisol (initially increase with gluconeogenesis (days 1-4) and then typically decrease)
- Female hormones fall leading to loss of menstrual flow
- Urinalysis commonly has elevations in bilirubin (+1 to +2), protein (trace, +2), and ketones (+4), and, if liver disease is present urobilinogen can rise
- Urine specific gravity is commonly elevated (1.025-35) with inadequate hydration.
- Urine has various types of casts: hyalin, RBCs, and WBCs

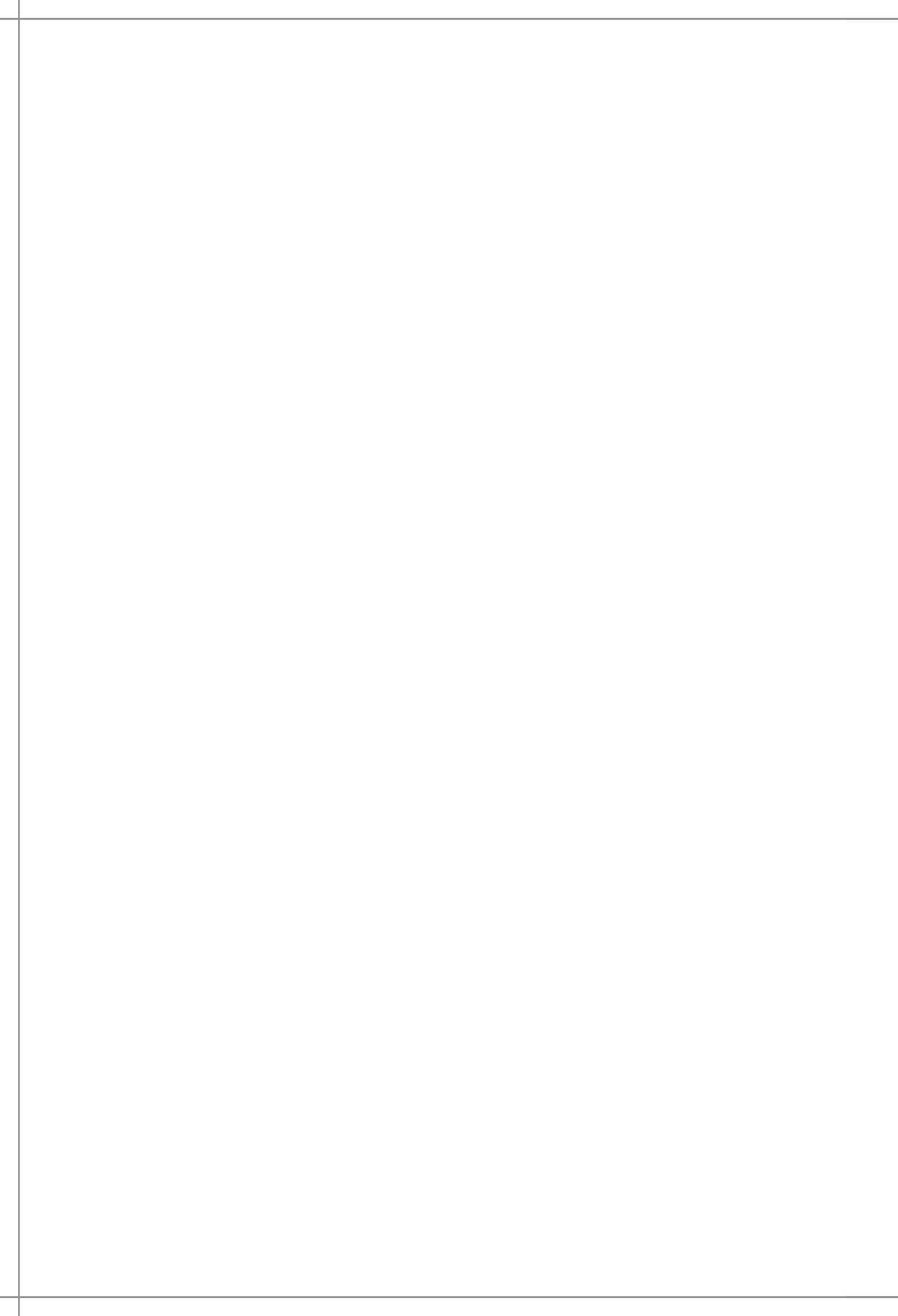
**URGENT: IF PRESENT, BREAK THE FAST IMMEDIATELY**

with veggie juice and baked yam or sweet potato with olive oil and sprinkle of sea salt.

- Electrolytes potassium, sodium, calcium, or magnesium may drop. Serum potassium usually decreases but may elevate. If values ever fall below 3.2 mEq/L or rise above 5.5 mEq/L then **BREAK** the **FAST**
- Creatinine may increase (watch! especially with ↑ BUN). If both increase then **BREAK** the **FAST**
- Liver function tests rise and albumin drops then **BREAK** the **FAST**

**Physical signs to monitor:**

- Weight loss of about 1-3 pounds per day is normal the first few days due to diuresis and natriuresis. (Ketone anions are accompanied by sodium cations as excreted through urine and later in the fast they are accompanied by ammonium).
- Blood pressure drops sometimes lower than 85/55 which is okay if non-symptomatic
- Pulse can be bradycardic falling to 40 beats per minute- okay if non-symptomatic
- Edema, delirium = **BREAK** the **FAST** due to renal insufficiency
- Jaundice, bruising, ascites, delirium= **BREAK** the **FAST** due to hepatic insufficiency
- Carpal pedal spasm, Chvostek's or Trousseau's sign: **BREAK** the **FAST**= severely low calcium and magnesium levels
- EKG: Changes on an electrocardiogram include sinus bradycardia, right axis deviation and a decrease in the QRS and T-wave amplitudes. Serious signs would be a prolongation of the QT interval, T wave inversion and ST depression signaling to **BREAK THE FAST**.



## *Chapter 32*

### **Raw Living Foods**

**A** living foods diet contains food that is ALIVE just as you would find it in Nature. These include plants and roots that are freshly harvested from the earth, seeds that are sprouted into living plants, and fermented foods that are teeming with billions of living bacteria. All of these foods have cells that are metabolically active, replicating, dividing, making ATP through photosynthesis and eliminating wastes. They are actively “living” just as your cells are “living.” These living cells contain biologically “activated” minerals, vitamins, enzymes, proteins, DNA and RNA. These nutrients are not in a dormant, indigestible chemical form as you would find in a multivitamin supplement. These nutrients are already highly assimilable and the most active form that Nature provides. Once you ingest a living food, its nutrients become your nutrients with little work from your liver to convert them for your needs.

Besides these obvious nutrients, a plant also provides us nutrients in the form of electrical energy. Each plant cell is like a little battery retaining a voltage from the negatively charged electrons within each cell. These electrons can be measured as “zeta potential,” or the electrical millivoltage of the cells. A plant cell dies when it is no longer able to utilize carbon dioxide and an animal cell dies when it is no longer able to utilize oxygen. Without these elements it cannot move the electrons down the electron transport chain to

make ATP. Thus a dead cell is one that is exhausted of ATP and unable to move its storage electrons to make ATP or maintain its millivoltage. Studies have proven that a dead cell does not hold the same charge as a living cell. <sup>1</sup>

The First Law of Thermodynamics is clear. It states *energy is neither created nor destroyed but just changes form* as well illustrated in the feeding cycle of animals. The radiant solar energy from the sun is transformed into chemical energy by plants as they turn the light rays into glucose and starch in a process called photosynthesis. Some plants have more chemical energy, (sugars) or “calories,” than others. We in turn can eat this food filled with caloric energy and release it to our cells as kinetic energy (heat) and electrical energy in the form of electrons moving down the electron transport chains. These electrons then drive the formation of the potential energy found in ATP which then completes the cycle converting our own food back into the chemical energy of glucose and fat storage.

But the plants do not just store the sunlight as glucose, the sunlight itself is also stored in the plant as “little packets of light energy” called “biophotons.” Since energy is never destroyed, these little packets of light are passed onto us when we eat the living plants. There is some idea that these biophotons contain vibrational information that is vital to insuring that our cells stay in the proper frequency with the earth and sun. The existence of biophotons is also the most reasonable scientific explanation for what has been called the *Life Force* or the Xi (Chi) as referred to by Chinese medicine. Although there is no perfect way to measure this life force, Kirlian photography demonstrates that even rocks and minerals and dead substances still have a weak resonant electrical field. Kirlian photographs of living beings have a much more profound field due to their enhanced flow of bio-electrical energy.

My teacher’s teacher Dr. Carey Reams, a biophysicist and agricultural chemist used to teach his students, “It’s not the food you live from but the energy of the energy of the food that gives you life.” It took me many years and many books to finally understand that what he was referring to were the biophotons. He was saying

that not only does food provide energy in the form of calories but the overall “life force” is also passed onto the consumer. Because energy is never lost, this vitality would pass on as another form of energy; as a living spark to our cells.

Freshly grown organic vegetables and fruits that have been allowed to sun-ripen on the vine are rich in biophoton energy. They are also abundant in enzymes as the ripening process multiplies enzymes to break down the larger carbohydrates into simpler more digestible sugar molecules. When a plant is harvested, electrical ions are released and the energetic qualities of plants decrease. The longer the fruit or vegetable is in storage, the more the energy decreases. The sooner you can eat the food after harvested, the better. Vitamins are destroyed not only by heat but also by exposure to air and light in a process called oxidation. Oxidation is one of the proposed chemical causes of aging. Thus a plant abundant in “anti-oxidants” will pass more of these life-saving molecules onto the consumer if it is eaten soon after harvesting.

Besides harvesting foods directly from the garden and eating them, you can also derive the benefits of biophotons by consuming sprouts. Sprouts are little seeds that have been awakened from their slumber through soaking in water and bathing in sunlight. This causes the seed to “germinate” and become quickened with life as ATP energy is made from the chlorophyll and sunlight through photosynthesis. The germination process deactivates phytates (nutrient inhibitors) and activates the sprout’s nutrients: amino acids, minerals and vitamins. If you make your sprouts at home remember to rinse them 3-5 times daily to remove these enzyme inhibitors.

Food that is cooked is easier for the body to digest and assimilate because the large molecules are broken down by the heat. Cooking though causes the food to lose the metabolically active nutrients, mainly antioxidants and biophotons. If you plant a cooked carrot and a raw carrot in soil, the cooked carrot will no longer grow because the cellular function has been destroyed. Therefore, cooked foods, even though easy to digest, lack the vital force of raw living foods.

To get the maximum benefits from our food, we would want to understand at what temperature the cell is killed.

Enzymes are protein molecules that speed chemical reactions, digest food, help in removing toxins and are vital to the metabolic processes of a living cell. Enzymes are destroyed with changes in pH (too acid or too basic) and can also be destroyed with heat and oxidation (light and air exposure). Just as a human being would scald in water of 140 degrees, a living plant cell can also not survive higher temperatures, usually anything above 118 degrees. In general, if your food has been heated to a temperature that you cannot physically touch, then the temperature will most likely also destroy the plant's cells and thus deplete the vital force. Seeds are known to withstand much higher temperatures as some tree seeds will not be able to sprout until first heated by a forest fire.

Proper storage will help retain the nutrients in plants even after they have been picked. For thousands of years our ancestors have used the warmth of the sun and open air to preserve vegetables, meat, fish, grains and seeds. As long as food temperatures do not rise above 118 degrees, drying food in a dehydrator can be a much better alternative to preserving food through freezing or canning. Dr. Ann Wigmore, a pioneer of raw foods would suggest dehydrating the first two hours above 120 degrees and then once the food had a soft outer shell then it was lowered to 105 degrees until finished. Most of the raw food gurus and scientific experts agree that keeping the food below 140 will preserve most of the biological active nutrients.

1) Acta Naturae. 2012 Jan-Mar; 4(1): 78–81

## *Chapter 33*

### **Acidity, Alkalinity & Bacterial Balance**

**M**uch has been written about the role of pH or the acid-alkaline balance in the body. A lower pH, less than 7.0 is considered an acid pH and that which is higher than 7.0 is considered basic or alkaline pH. The lower the pH, the more acidic the chemistry and the more positive charge (+) which results in a lower voltage or lower free electron energy due to the excess hydronium ions (H<sup>+</sup>). The higher the pH, the more basic the chemistry and the more negative charge (-) which results in a higher voltage or a greater amount of free electrons due to the excess hydroxide ions (OH<sup>-</sup>). My teacher's teacher, Dr. Carey Reams related his knowledge of soil chemistry and applied it to the human body chemistry. He collected samples of urine and saliva and among many other measured values, took the pH and entered it into his mathematical equation to determine a patient's overall health. Dr. Reams found the optimal pH to be about 6.2-6.4 for the urine and about 6.6-7.0 for the saliva. At these levels the digestive enzymes are considered to be robust and the ability for the body to turn food into energy is optimal.

It is the electron rich, high voltage medium found in alkaline foods that has been shown to be so healing; maybe because it is high in alkaline minerals like sodium, potassium, calcium, magnesium, boron, manganese, iron and zinc. It may also be due to the free electrons (e<sup>-</sup>) available to act as antioxidants neutralizing oxidation

(+). We are aware that acid has a caustic or inflammatory quality as it can burn when touching the skin. It would be fair to say that excess acid in the blood and tissues could have a similar inflammatory response and after time could result in cellular breakdown. These alkaline rich foods are typically plants such as carrots, beets, parsnips, rutabagas, potatoes, sweet potatoes, yams and other roots and most all vegetables from squash, zucchini, beans, peas, broccoli and cauliflower to all leafy greens like chard, spinach, and lettuces. Some fruits are more alkaline than others and many are high in natural acids like citrus, sour apples, pomegranates, cranberry, tomatoes, etc however because of their natural minerals we'll treat them as a neutral food.

Excess acids can come from the food we consume and dominate in the acid minerals: sulfur, phosphorus, and chloride. Foods that tend to push the body chemistry in a more acidic balance would be foods like alcohol, coffee, tea, soda pops, carbonated drinks, pasteurized juices, and protein rich foods like meat, grains, and dairy products. Acid can also come from toxins that are introduced into our body through chemical contamination (medications, household, recreational, and environmental) or by toxins which our body makes itself as a byproduct of healthy human metabolism (uric acid, lactic acid, carbonic acid, etc). Acids can even be formed with extreme physical and emotional stress such as seen in over-exercising, major trauma, accidents, life changing events, loss of loved one, jobs, divorce or relocation.

One area we want to most definitely protect against is the build-up of excess acidity in the blood and tissues. The blood pH is optimal at 7.35 and if it drifts just a degree in any direction, the organism could die. Equally we want pH to be more neutral in the saliva around 7.0 so that we can protect against decay and the salivary enzymes work more efficiently to digest carbohydrates. In our clinic we check both the urine and saliva to determine the health or degree of sickness of our patient. We use sophisticated meters but you can get a good idea of your pH level by purchasing pH tape from the pharmacy. Check your urine and saliva levels about

2 ½ - 3 hours after eating breakfast and making sure nothing has been in your mouth for at least an hour. We are looking for a range of about 6.2-6.4 for the urine pH and about 6.6-.7.0 in the saliva pH for optimal digestion and elimination.

From my experience of testing the body fluids in the clinic and in fasting retreats, I have noticed that during a cleanse the urine pH will often increase in the beginning as hydration improves and the diet is switched to healthier foods high in alkaline minerals. However, after proceeding deeper into a cleanse (2-3 days) the body enters its own detoxification state and it will release the stored acids in the tissues. This will create a more acidic urine dropping it less than 6.0 pH. If a person continues the cleanse into a fasting state then the pH of the urine will drop even further to 5.5 or lower as the body coverts into ketoacidosis. Once the body begins to refeeding with the wide assortment of alkaline vegetables then the urine pH will climb once again neutralizing the acidity.

If the alkaline foods such as root vegetables (carrots, beets, parsnips, potatoes, yams, sweet potatoes) and the dark green vegetables (broccoli, celery, lettuce, cabbage, spinach chard, etc) are eaten or juiced one may see that their pH persistently measures over 6.8 in the urine. Because long term alkalinity can be just as problematic as long term acidity, in the clinic I will add enough *hydrochloric acid* (HCL) supplementation with the veggie juices and vegan meals to bring the urine pH back down into a healthier range. In addition to HCL supplementation, I may also recommend the use of naturally acidic foods to balance the elevated pH. These foods include apple cider vinegar with acetic acid, apples with malic acid and citrus fruits with citric acid. I will also encourage the consumption of lactic acid from fermented foods to bring the urine pH back into the 6.2-6.4 range 2-3 hours after a meal.

Healthy volumes of hydrochloric acid are naturally secreted by the stomach and are essential to completely digest our food. HCL breaks down the large protein molecules in our food into smaller protein molecules for assimilation of amino acids and minerals. A healthy amount of HCL in the stomach also protects against

pathogenic bacteria like *Helicobacter pylori* and other opportunistic bacteria that could be consumed with undercooked or contaminated meats. If too little HCL is secreted as seen in “hypochlorhydria” it can result *H. Pylori* overgrowth, SIBO (small intestinal bowel overgrowth) and the all too publicized “leaky gut syndrome.” An imbalanced digestive pH affects the healthy bacterial populations in the small intestine and results in low levels of inflammation. This inflammation can erode the protein adhesion molecules between cells making the intestine more porous. This “leakiness” allows large protein food particles and possibly bacteria into the blood supply causing an immune response from the body. The patient will often have dark circles under their eyes, deep fissures on the surface of the tongue and typically fatigue, allergies, and a hyper or hypo immune response.

A history of antibiotic use, steroid use, and ant-acid medications have also been shown to affect this healthy bacteria balance in the digestive system as birth control pills and contraceptives can affect the bacteria in the vaginal mucosa. I rarely prescribe proton pump inhibitors like Prilosec, Nexium or Prevacid to my patients because reducing acid during the primary stage of digestion is turning out to be a major issue. Reducing acid with these drugs is now associated with kidney disease, osteoporosis, pneumonia, intestinal infections, nutrient deficiencies and even dementia!<sup>1</sup> This just proves the importance of maintaining healthy levels of HCL in the stomach for complete digestion and utilization of the food molecules by the cells.

1) *JAMA Neurol.* Published online February 15, 2016.

## *Chapter 34*

### **Fermented Foods and Probiotics Related to Cleansing and Fasting**

**K**eeping our pH balanced is the most important factor to maintain healthy populations of the good bacteria known as “probiotics.” These are the bacteria which live naturally in our digestive systems and perform vital digestive functions. They make essential vitamins for us like niacin, folic acid, pyridoxine, cobalamin (B12), biotin and vitamin K. They also act as part of our immune system protecting us from intestinal infections, cold and flu, urinary infections, vaginal infections, skin infections and even allergies. They even protect against the bad bacteria which promote cavities in our teeth! When the good bacteria are in sufficiently high numbers the bad bacteria, yeast, viruses, parasites and fungi won’t over-populate and create illness.

To maintain proper pH and bacterial balance you will want to follow the dietary advice as I have suggested thus far and eat a diet high in vegetables to firstly provide the fiber necessary for a healthy stool. I also recommended consuming vegetables that are grown in healthy organic soil so you can actually consume small amounts of the bacteria “dirt” that live in the soil known as “soil based organisms” or SBOs. Also, bump up your consumption of fermented foods that are teaming with healthy bacteria by consuming sauerkraut, kimchee, Rejuvelac and other fermented vegetables.

The fermentation of your food in your stomach is not the same

as eating “fermented foods.” Fermenting food in our gut is not a healthy process because it pertains to an incomplete digestion of one’s food due to improper diet choice and/or inadequate digestive enzyme production. Eating fermented foods however is very healthy because they are also considered “living foods,” not because the plant itself is alive anymore, but because the plant is now home to millions of living bacteria. One type of these bacteria found in sauerkraut is called “lactic acid forming bacteria” and releases lactic acid as a byproduct of fermentation. The sauerkraut pH drops to 3.0 and I find it excellent to stimulate the upper digestive system before meals and maintain the perfect pH needed by the digestive system for the continued growth of healthy bacterial populations.

It was thought there were only a few common species of bacteria found in sauerkraut fermentations: *Leuconostoc mesenteroides*, *Leuconostoc fallax*, *Lactobacillus plantarum*, *Pediococcus pentosaceus*, and *Lactobacillus brevis*. However, now with more sophisticated DNA testing, science is revealing there are actually many more strains than previously reported and now include: *Leuconostoc citreum*, *Leuconostoc argentinum*, *Lactobacillus paraplantarum*, *Lactobacillus coryniformis*, and *Weissella* species.<sup>1</sup> In my experience I see people respond better when they rotate their probiotic supplements and not take the same species (strains) over and over. As you can see from this research, this would more replicate the numerous types of bacteria that we would encounter in nature if we ate a wide variety of fermented foods. The greater number of species of bacteria we culture in our guts, the greater immune support and protection from allergies that we maintain. Therefore, in place of supplemental probiotics, I feel strongly that fermented foods are more potent and a better natural fit for the body especially when consumed daily and in different forms.

Some of those forms of fermented foods are beneficial because of the types of “yeasts” they offer. It is important not to confuse the food yeasts *Saccharomyces* from the family *Ascomycetous* with the pathologic yeasts *Candida albicans* and *Candida glabrata* that cause an infection in the body known as *Candidiasis*. The healthy yeasts from

*Saccharomyces* and *Ascomycetous* do not cause *Candida* but rather are used to treat such infections. Those that I recommend for patients are the healthy yeasts found in apple cider vinegar, kombucha and in supplement form as *Saccharomyces boulardii*.

Kombucha refers to a fermented black or green tea that makes a slimy leathery pancake which looks like a mushroom but is actually a Symbiotic Culture of Bacteria and Yeast (known as a SCoBY). It most commonly contains a combination of *Acetobacter* and *Gluconacetobacter bacteria* that produces acetic acid and gluconic acid and the yeast strains of *Saccharomyces ludwigii*, *Saccharomyces apiculatus*, *Schizosaccharomyces pombe*, *Zygosaccharomyces kombuchaensis* and *Saccharomyces cerevisiae*. Some people may be sensitive to the caffeine content which is still about ½ the amount it started with so it is still not my favorite for a detox program.

Apple cider vinegar has been touted as a famous health food for thousands of years and its use is validated. It also uses *Saccharomyces cerevisiae* to ferment the apple into an alcohol and then the alcohol is converted to acetic acid by the bacteria *Acetobacter* like those in the kombucha. These will accumulate to make a skin-like substance form called “The Mother” or the Mycoderma aceti filled with these healthy bacteria and trace amounts of *Saccharomyces cerevisiae*. Apple cider vinegar is an excellent digestive stimulant as well as a balancer of digestive pH like sauerkraut.

In the clinic it is not uncommon for patients to have “food yeast” sensitivities from the over consumption of the food yeasts *Saccharomyces cerevisiae* as found in baker’s yeast (bread), brewer’s yeast (wine and beer) and also found in high numbers on the skin of fruit (seen as a white film on the skin of grapes and plums). Many patients come to our clinic for symptoms of fatigue, digestive complaints, lowered immunity, allergies, vaginal infections and often skin conditions. After doing some testing we determine that their body is over-responding to the intake of yeast and yeast products. An overconsumption of *Saccharomyces cerevisiae* will displace other healthy yeasts and bacteria in the gut and can result in the fore-mentioned symptoms to name a few. Interestingly, these

patients often test well for another type of yeast supplement called *Saccharomyces boulardii* which we commonly give for diarrhea and infectious conditions like *Candida albicans* of the mucous membranes and *Clostridium difficile* of the digestive system.

Even though they do not supposedly cause one another, in my professional observation, those with *Candida albicans* overgrowth do not do well with the *Saccharomyces cerevisiae* strains. I found some literature that indicates they share similar morphology and physiology which has led to *Candida*'s stubborn drug resistance.<sup>2</sup> I also found some literature to support that people with inhibited immune function can actually maintain a dual infection of both of these organisms at the same time.<sup>3</sup> Because of this close familial relationship, I will remove all brewer's yeast, baker's yeast, and fruit from a patient's diet suspected of overgrowth, sensitivity or allergic reaction to *Candida albicans* or *Saccharomyces cerevisiae*. I will also not use kombucha because of its high amount of *Saccharomyces* and if they are really sensitive I will not have them use apple cider vinegar because of the possibility for trace amounts of *Saccharomyces cerevisiae* yeast. I will recommend high amounts of the lactic acid bacteria found in sauerkraut, kimchee, and Rejuvelac as well as increase the competitive *Saccharomyces boulardii* to crowd out the over population of food yeasts *Saccharomyces cerevisiae*.

- 1) Appl Environ Microbiol. 2007 Dec; 73(23): 7697–7702.
- 2) FEMS Microbiol Lett. 2011 Jan; 314(1): 1–9.
- 3) Rev. bras. ter. intensiva vol.23 no.1 São Paulo Jan./Mar. 2011

## *Chapter 35*

### **Excretion Channels: Bowels, Liver, Kidneys, Lymph**

#### **How Your Body Cleans Itself Naturally**

**Y**our body is naturally cleansing itself 24 hours a day without you ever having to think about it. There are several detoxification systems which protect the body from drowning in its own waste. The large intestine cleanses the body by eliminating metabolized food and dead cells through the feces. The liver cleanses the blood by deactivating the toxins and dumps them into the gallbladder. The kidneys clean the blood by filtering it and excreting the waste known as urine. The spleen and lymph nodes clean each individual cell through the lymph fluid. The lungs remove carbon dioxide through the breath and the skin removes toxins from the tissues through sweat. If you have headaches, bad breath, reflux, indigestion, constipation, diarrhea, irritable bowel, abdominal pain, food allergies, gallstones, elevated liver enzymes, elevated cholesterol, cardiac conditions, kidney stones, urinary disorders, peripheral edema, or any skin condition, you'll find great benefit in this chapter.

The bowels are a primary channel of elimination as discussed in the first book *Nature's Diet*. A sluggish, irregular bowel can lead to diverticulosis, or "pockets" of fecal waste in the colon wall, which can become progressively irritated and lead to diverticulitis

or irritated bowel syndrome (IBS). If constipation becomes chronic it can also lead to hemorrhoids, fissures, prolapsed colon, reactive diarrhea, appendicitis, diverticulitis, irritable bowel disease (IBD) and even bowel cancer.

The digestive system can become inflamed due to unhealthy food choices. This causes the chemistry to change, unhealthy bacteria take over, and the body responds to the inflammation by secreting mucous. This mucous is a natural protective mechanism to soothe the inflammation, however over time it can become thick and prevent the absorption of micro-nutrients causing deficiencies. This thickened mucous also coats the microvilli fingers of the intestines further inhibiting proper nutrient absorption. Without this absorption, the entire body suffers as symptoms slowly emerge, sending warning signals of impending malnourishment. This is nothing more than a preliminary clue for future disease if it is not treated and resolved.

The food we eat needs to be eliminated from the bowels within 24 hours of eating it. The bowels also need to be actively eliminating 2-4 times per day (approximately after each meal). If both of these requirements are not met, it puts strain upon the liver and kidneys to remove this excess waste being re-absorbed into the bloodstream from the large intestine. This is why it is absolutely imperative that all the organs are functioning optimally. A human being can be constipated from days to even weeks without significant harm, but if you lose the function of your liver or kidneys, you won't survive very long at all. Maximizing the function of all these organs means that they will be more effective in eliminating wastes naturally and will put less stress on any particular one of them.

It is worthwhile mentioning here that the digestive system is also highly connected to our mood and emotional state. Today we are plagued with insomnia, anxiety, depression, and the inability to focus or remember. The brain hormone most likely affected, serotonin, is also made in the gut by the intestinal cells. Therefore some doctors are using selective serotonin reuptake inhibitors (SSRIs) like Prozac, Paxil, Zoloft, or Celexa to treat irritable bowel syndrome (IBS).

Not my recommendation, but the idea is interesting. Have you ever heard of a “gut feeling”? Well this is a perfect example of how that connection can be made- the same hormones made in the brain are also made in our gut! Because of this, as a clinician I always consult with my patients about their current stressors and emotional states like fear, anger, and sadness that could be the cause of their digestive symptoms and even lead to more serious digestive disease.

One of the liver’s main jobs is to cleanse the blood stream and detoxify it of harmful chemicals. After eating a meal the food passes into the small intestine where it is absorbed and is carried to the liver via the hepatic portal vein. This nutrient-rich blood is filtered by the liver of any toxins before it is dumped into the heart through the inferior vena cava. It has been suggested that *heart rhythm irregularities* may be caused from *toxic chemicals that were not filtered out properly from the bloodstream* due to an overburdened liver. It is anatomically appreciated that a sick or congested liver can slow venous blood flow back to heart. It is also understood that right sided congestive heart failure can lead to liver congestion, *congestive hepatopathy*. Therefore liver health can affect heart health and heart health can affect liver health.

Elevated blood cholesterol levels are less likely indicating a deficiency of a statin drug, and more likely a call to clean the liver’s biliary channels with diet and herbal medicine. The liver manufactures cholesterol to be used for healing micro injuries in the arteries, making cell membranes, and providing the backbone for hormone production. When the body is inflamed the liver goes into overdrive producing excess cholesterol to “patch” the micro-injuries in the arteries. This raises blood cholesterol and triglycerides making a thicker blood. This fatty blood again passes into the liver and can block the biliary channels making little cholesterol deposits or stones and absorption of triglycerides into the liver tissue. This is an inflammatory vicious cycle resulting in a “fatty liver.” The bile flush discussed in Chapter 37 is one of the most valuable methods for eliminating these fatty deposits within the liver.

Bile is made in the liver and sent to the gallbladder for storage.

Bile is released into the small intestine when a fatty meal is eaten. If the proportion of bile cholesterol is too high in comparison to the bile lecithin and bile salts, then stones may form in the liver (intrahepatic biliary stones) as well as in the gallbladder (gall stones). Stones may also form if the gallbladder is stagnating and not contracting or ejecting bile properly. The majority of people with gallstones feel no physical discomfort, however the stones prevent proper flow of bile into the small intestine which is needed for optimal digestion. When blood levels of bilirubin increase it is likely a gallstone blocking the bile duct causing bile to be re-absorbed and circulated in the blood. A healthy liver should be producing about 1000 mL per day of bile. When a liver becomes congested and burdened with toxins the bile production can reduce to 250 mL or less. This can be remedied by stimulating bile flow naturally with bitter botanical extracts like those I've included in *Nature's Detox Liver Cleanse™ Part 1, Part 2 & Part 3* ([www.drandrewiverson.com](http://www.drandrewiverson.com)). I also recommend foods that promote bile flow (see Chapter 37) and I may also prescribe bile salts to take on rising and before meals. Additionally, I teach my patients how to do a liver massage (see Chapter 39) to promote the flow of stagnant bile.

Bile is a natural laxative and when secretion is low it can cause constipation, a floating stool, and/or a light colored stool due to the residual fat left in the stool. Bile acts to partially neutralize the high acidity coming from the stomach into the duodenum (in partnership with enzymes from the pancreas). A lack of bile may result in excess acidity and gastritis while excess bile (being hyper-dumped from an irritated liver) can regurgitate back into the stomach and neutralize the pH of hydrochloric acid. Bitter or metallic tastes in the mouth can be caused from this bile regurgitating into the stomach and then up the esophagus. Improper bile flow then can cause indigestion as well as GERD and change the stomach or intestinal pH promoting unhealthy bacteria like the ulcer causing *Helicobacter pylori* to populate. Besides the dental sources (abscesses, cavitations, root canals), sexual organs, and the appendix, the gallbladder can also be a reservoir for its own latent infections. It can harbor bacteria, viruses, and even parasites. For this reason I especially compounded the herbs

in *Nature's Detox Liver Cleanse™ Part I* to clear these infections and promote abundant bile flow.

Some symptoms of stagnant gall bladder and liver dysfunction can be right sided pain under the ribcage, digestive symptoms after eating (especially fatty foods), nausea, bloating, gas, belching, pain with breathing and pain that extends into the right shoulder blade. My patients have had chronic symptoms associated with lack of bile flow such as headaches, skin conditions, and even mood imbalances. I like to teach my patients about the origins of the word “melancholy” which is from the Greek roots meaning “black + bile.” As in ancient times it was found upon autopsy, depressed people were known to have had a gall bladder with stagnant “black bile,” hence the application of the word “melan-choly”. If you have any current or prior history of depression, anxiety, or mood disorder a good cleansing of the liver/gallbladder meridian may do wonders.

Some classical Chinese medicine signs of liver congestion are “liver spots” or “age spots” scientifically known as *lipofuscion conglomerates*. These are the brown spots that are identified as “oxidative damage” on the skin typically of the hands. One might also have an increased wrinkling of the skin in general and possibly a vertical furrow of the eyebrows (the angry wrinkles). If the liver is not making enough antioxidants or overburdened with chemicals the result can be a higher level of oxidation in the body resulting in premature skin aging. Other signs of liver dysfunction are cherry angiomas (little red broken vessels that look like red cherries on the skin), a general yellowing of the skin, and a yellow coating of the tongue or whites of eyes. Read further to learn how to specifically treat the liver and gallbladder function with food and plant medicine.

Liver health is highly paralleled with lymphatic health. The lymph system collects the wastes that were dumped by each and every cell from the extracellular fluid. This lymph fluid is then transported via lymph channels to the lymph nodes and lymph organs (the spleen, thymus, tonsils, and appendix). Here the lymph fluid is cleansed and enhanced with more immune cells and immune factors. From there it flows to the thoracic duct and dumped back into the blood supply.

If the lymphatic system is not able to purify the blood properly then this dirty lymph gets redeposited into the blood for the liver and kidneys to clean.

Some would argue that the kidneys are more important than the liver in detoxification processes. The kidneys filter the blood by removing the contaminants and retaining the nutrients. This is done through a network of tubules that extend 70 miles long and form approximately 1 million nephrons or “mini filters”. This delicate tubule system can be damaged by chemicals, especially heavy metals, and can be overwhelmed with the burden of high salts, high protein, and high acidity. This can result in one of the most painful maladies of mankind: kidney stones. Excess consumption of dairy products, sugar, soda pop, meat protein, high fructose corn syrup, calcium supplements, vitamin D supplements, nuts, soy, black tea, and chocolate can all result in kidney stones by creating an imbalance of calcium in the blood. As well, just a lack of water and excess intake of dehydrating substance (coffee, alcohol, tea, caffeine drinks) can also cause stones. A simple test at home is to collect a sample of your urine in a glass two hours after eating a meal and hold it up to the light. It should be light yellow with very little to no particulate floating. If it is dark colored, cloudy or heavy with particulate, then the urinary system is subject to inflammatory stress.

The urinary system includes the kidneys, ureters, bladder, and urethra including genital tract for women and prostate for men. All of these organs gain benefit by cleaning the diet and adding in botanical medicines specific for the urinary system as I have compounded in *Nature's Detox Urinary Cleanse™ Part 1, Part 2, & Part 3*. Increasing the fluids will dissolve mineral deposits in the urinary system and may cause pain or discomfort in the back or bladder as they are eliminated. Simply continue the diet and increase the fluids and even switch to distilled water to help the body eliminate the deposits more quickly. Chinese medicine has associated the health of the kidneys with the health of the heart and vascular system. I commonly see these two connected in the clinic, therefore heart conditions can be benefitted with healthier kidneys and vice versa.

If one of these detoxification systems (bowels, lymph, liver, kidneys) is not functioning optimally, the body may choose instead to eliminate the toxins through its largest organ- the skin. I typically do not see skin conditions as a problem with hygiene or the skin itself. I instead interpret skin conditions as a message from the body that the natural detox channels are burdened and it is unable to excrete the wastes properly. I treat skin conditions like dermatitis, eczema, psoriasis, acne, hives and other skin ailments merely by having patients follow a *Nature's Detox* diet high in living foods and fermented foods and promoting elimination through the bowels, liver, lymph and kidneys.