# A Summary of Scientific Studies on the Virtues of Raw Dark Chocolate and Sprouted Nuts & Seeds for Pregnant & Nursing Moms

## and Why are **HNINA** Products Ideal for Mom & Baby?

A Guide	for Mot	hers, N	utrition	ists, Do	oulas an	d Docto	rs Alik	кe	

Proper prenatal care includes eating a nourishing whole foods diet. Nutrition is critical because what mom eats daily shapes baby's development before and after birth.

It is very common for pregnant women to have food <u>cravings</u>. They often desire pickles, sweets and, yes, dark chocolate. These cravings are often the body's cry out for needed nutrients. A mother that can accurately interpret such cravings is by definition more likely to enjoy eating healthy nourishing foods. But all cravings are not created equal, nutritionally speaking, and the quest is full of pitfalls. Mom must be presented with all the necessary information to make the right choices for her and baby.

Scientists have now revealed that one of the top cravings, <u>dark chocolate</u>, as well as nuts and seeds provide tremendous health benefits during <u>pregnancy</u> and breastfeeding. This report summarizes their numerous health benefits and provides links to pregnancy specific scientific studies and articles.

### **The Hnina Difference**

Like cravings, all dark chocolate is not created equal. It is not only the presence of good ingredients that counts in the quest for healthy food, but the absence of bad ones.

The vast majority of even high end dark chocolate products include significant amounts of unhealthy sweeteners, as well as emulsifiers. Lower end products include hydrogenated oils, corn syrup, wax and an assortment of carcinogenic chemicals and synthetic components like vanillin.

Most dark chocolate is not organic and therefore subject to pesticide and GMO contamination.

Furthermore, most cocoa beans are fermented at high temperatures or roasted, thereby degrading or eliminating the many beneficial living elements in <u>raw</u> chocolate.

In contrast, HNINA products are pure, always using only certified organic ingredients, raw fair trade cocoa, only small amounts of highly nourishing, non-inflammatory sweeteners like raw honey, pure maple syrup and dates, real vanilla bean and never ever anything else!

Furthermore, HNINA's line of truffles and raw cocoa nut butters and snacks include <u>sprouted</u> nuts and seeds. Ordinary nuts and seeds have significant health benefits for the pregnant and nursing mom, but Hnina's organic raw sprouted nuts & seeds are nutritionally far superior due to their bio-availability. During sprouting, not only do the nuts & seeds "come alive" increasing the presence of living enzymes and nutrients, but phytic acid the so-called "anti-nutrient" enzyme inhibitor is eliminated, allowing for maximum absorption of nutrients for the benefit of mother and child.

#### **Dark Chocolate**

#### Milk chocolate does not count

A <u>study</u> by researchers in Scotland and Italy found that "Those volunteers who had dark chocolate had a 20 per cent increase in antioxidants in their plasma, but those who had milk chocolate, or milk with their dark chocolate, showed no increase in epicatechin plasma levels. Presumably the epicatechins are binding to the milk proteins," he told **New Scientist**.

### Dark chocolate is rich in flavonoids which are potent antioxidants

Pregnant women can benefit from the <u>antioxidant properties of flavonoids</u> specifically in improving immunity. A 2001 <u>Swiss study</u> found that cocoa beans and dark chocolate have equivalent or significantly greater ORAC (Oxygen Radical Absorbance Capacity) than other "superfoods" such as acai, blueberry, and pomegranate powders due to their macronutrient composition and are a "Super Fruit".

#### Eating dark chocolate can reduce cravings for junk food of all kinds — sweet, salty and fatty

Dark chocolate helps cut cravings, make healthy <u>food choices</u>, cut calories and lose weight. Interestingly, when scientists put the beneficial ingredients of chocolate in a pill, they did not have the same effect.

### High-flavanol dark chocolate can boost fetal growth and make the placenta more efficient

According to a <u>new study</u> conducted at Université Laval in Québec City, women who eat dark chocolate daily were found to have 20 percent less chance of suffering a first-trimester miscarriage. Dark chocolate also decreases the risk of a dangerous pregnancy complication known as preeclampsia. Study co-author Dr Emmanual Bujold said: "This study indicates that chocolate could have a positive impact on placenta and fetal growth and development and that chocolate's effects are not solely and directly due to <u>flavanol content</u>."

### A happier baby

According to a **study** conducted in Finland, women who ate chocolate during pregnancy reported having "happier, livelier babies. The scientists said that while they could not rule out other factors, they speculated that the results could be linked to dark chocolate consumption. <u>The babies</u> also respond well to new situations as compared to the babies of women who did not eat chocolate <u>during pregnancy</u>. And this result is linked to the chemicals contained in dark <u>chocolate</u>, particularly phenylethylamine. It is believed to be passed on from the mother to the child in the womb.

#### Chocolate aids in proper blood pressure regulation

<u>Cocoa</u> contains theobromine which contributes to the proper regulation of blood pressure in pregnant women by aiding in the dilation of the blood vessels.

### **Healthy fats**

Dark chocolate is high in <u>satiating fat</u>. If a mother is on a low fat diet, her body may be craving chocolate for its fat content. Dark chocolate contains mostly saturated and monounsaturated fat, with smaller amounts of polyunsaturated fats.

#### Dark chocolate has iron, magnesium and other nutritional contents

Getting more magnesium from dark chocolate can improve memory, <u>focus</u>, <u>mood</u>, sleep, and resilience to stress. Magnesium is known to help significantly with fatty acid metabolism. Women can benefit from these nutrients contained in dark chocolate during the duration of their pregnancy. Only 25% of adults get the recommend amount of magnesium daily.

#### Dark chocolate improves learning, memory, and focus

<u>Cocoa's flavonoids</u> penetrate and accumulate in the brain regions involved <u>in learning and memory</u>, especially the <u>hippocampus</u>. One <u>study</u> published in the New England Journal of Medicine reports that the more chocolate a country consumes, the more Nobel prize winners it has! Eating <u>dark chocolate</u> has been shown to be neuroprotective and enhance brain plasticity, a trait that's linked to increased intelligence.

# Dark chocolate improves blood flow to the brain

A <u>study</u> at Harvard Medical School found that drinking two cups of hot chocolate increased blood flow to the brain for 2-3 hours. This <u>blood flow</u> boost improved scores on a working <u>memory</u> speed test by 30%.

# Dark chocolate supports good intestinal bacteria, helping your brain

<u>Dark chocolate</u> and especially its less processed forms stimulate the growth of good bacteria. Lactobacilli and Bifidobacteria are two of the most prevalent "good" bacteria in our gut and are found in most probiotic supplements. They act as antioxidants, protecting our brain from free radical damage. Dark chocolate acts as a prebiotic, keeping good bacteria levels high and bad bacteria in check.

### Dark chocolate can help pregnant women manage weight and reduce cholesterol levels

<u>Dark chocolate</u>, when consumed moderately, can help pregnant women by reducing cholesterol.

## **Sprouted Nuts & Seeds**

Nuts, seeds and dried fruits are abundant in essential vitamins and minerals and can help meet the nutritional needs during pregnancy and nursing.

They are high in fiber which can ease constipation, a common complaint during pregnancy.

Nuts are also a good source of iron, zinc, omega 3 essential fatty acids and protein. Nuts are a rich source of vitamin B and E. Essential minerals such as phosphorous, potassium, zinc, selenium and copper are also present in high amounts that are essential for the proper development of the fetus.

Nuts and seeds are literally the seed of life for a new plant and are packed with key ingredients to generate life. The process starts when they are soaked in water, emulating nature's process of germinating the <u>seed of a plant</u>. This "activation" or "sprouting" not only floods the living nut and seed with nutrients but eliminates phytic acid, an enzyme inhibitor which is known to bind to nutrients, preventing their full digestion. Sprouted nuts & seeds are therefore bioavailable ensuring the most nutrient dense experience.

The chart below lists the key nutrients found in common nuts, seeds and dried fruit used in HNINA products and how they support mother and baby:

Nut, Seed & Dried Fruit	Nutrient	Benefit
Almonds Dates	Calcium	Calcium reduces the risk of hypertension and pre-eclampsia during pregnancy. It helps baby grow strong bones and teeth, healthy nerves and muscles.
Cashews Pine nuts Pistachios Walnuts	Copper	Copper helps make use of the iron stored in your body. It is also important for organs and muscles to work smoothly.
Dates	Fiber	Fiber helps to prevent heart disease and diabetes. It regulates weight gain and improves digestion.  It helps to prevent constipation, a common pregnancy complaint and helps keep blood pressure low.
Dates Cashews	Iron	Having enough iron in your body prevents anemia.
Almonds Cashews Pistachios Walnuts Hazelnuts	Manganese	Manganese is important for healthy bones. It helps regulate mother and baby's weight gain. It reduces the risk that baby will be relatively small for the growth stage. It also helps regulate metabolism, thyroid function, blood sugar, and normal skeletal growth.
Almonds Cashews Pine nuts	Magnesium	Ensures the growth and maintenance of bones, proper function of nerves and muscles, and helps bowel movement.

Walnuts Flax seeds	Omega 3 fats	Helps in the development of the unborn baby's brain and eyes and supports the nervous system. Walnuts, with 2.6 grams in a 1-ounce serving, serves as the best nut source of omega-3 fatty acids and polyunsaturated fats found in just a few foods.  Many pregnant women have trouble getting an adequate supply of omega-3 fatty acids because of the recommendation that pregnant women not eat more than 12 ounces of fish per week due to the risk of mercury contamination.
Cashews	Phosphorus	Helps in forming healthy bones. Develops blood clotting and normal heart rhythm.
Dates	Potassium	Improves muscle control and blood pressure. Is known to help prevent hypertension.
Almonds Sunflower seeds Hazelnuts Flax seeds Sesame seeds Walnuts	Protein	Helps in weight gain and increasing baby's birth weight. Substantially lowers the risk that baby will be of small for the growth stage. Proteins are required for building and repair of the body's tissues. This includes a the growing baby in its mother's womb.  The amino acids that make up protein are the building blocks of the body's cells, including those of the baby. Protein is also an excellent source of energy.
Almonds	Riboflavin	Energy production and baby's bone, muscle and brain development.
Pecans Pistachios Sesame seeds	Vitamin A	Important for eye, skin and bone health.
Hazelnuts Pistachios	Vitamin B6	Helps prevent anemia, treats heart disease and high cholesterol.

Almonds Sunflower seeds Pine nuts Hazelnuts	Vitamin E	Can prevent problems in the later stage of pregnancy due to high blood pressure (pre-eclampsia).  Vitamin E is an antioxidant which has been shown to be supportive of nerve cells, red blood cells, the liver and the immune system.
Pine nuts Cashews Hazelnuts	Vitamin K	Important for normal blood clotting and making proteins for bones.
Pine nuts Pumpkin seeds Sesame seeds	Zinc	Improves immunity. Helps form baby's organs, skeleton, nerves, and circulatory system. Zinc works with more than 300 different enzymes in the body to keep it running smoothly. It is important because it plays an important role in proper development of ova and sperm, hormonal balance, prevention of chromosomal defects, and prevention of recurrent miscarriage.

# **The Importance of Eating Nuts to Prevent Allergies**

"Advice to pregnant women to avoid eating nuts may have been not only misleading but at odds with the potential benefits for offspring of doing so, according to research that has found children could be less likely to develop nut allergies if their mothers eat nuts during pregnancy."

Dr. Michael Young, an associate clinical professor of pediatrics at Harvard Medical School, and colleagues collected data on more than 8,200 children of mothers who took part in the <a href="Nurses">Nurses</a>' Health Study II. The researchers found that mothers who ate the most peanuts or tree nuts five times a week or more had the lowest risk of their child developing an allergy to these nuts.

Dr. Ruchi Gupta working in Chicago, at the Northwestern University Feinberg School of Medicine, <u>states</u> that pregnant women must not eliminate nuts from their diets as these are a good source of protein and folic acid.

### The Importance of Dark Chocolate & Sprouted Nuts & Seeds for Breastfeeding

Being a mom to an infant is exhausting. When breast-feeding our baby, we need to be available 24-7. That's why food choices that are healthy and nutrient-rich are essential. Those cravings for sweets and fatty foods during this time are most likely related to lack of sleep and changes in brain activity. Sleep deprivation impairs the ability to make decisions and increases our desire for rewards, according to a 2013 <a href="study">study</a> published in "Nature Communications." These alterations in brain activity increase desire for unhealthy foods, the researchers found.

While there's not too much we can do about lack of sleep until baby gets a little older, making sure to get enough quality and nutrient dense food calories may help decrease the desire for unhealthy foods. In fact, eating and even smelling chocolate helps with appetite suppression.

A nursing mom uses <u>500 calories</u> each day to make enough breast milk to feed a baby up to 6 months of age, according to the Academy of Nutrition and Dietetics. Two-thirds of those calories come from food, while the rest is from the weight gained during pregnancy.

The food mom eats during breastfeeding affects not only her health but baby's. Hnina's dense nutrient foods help significantly reduce cravings for empty calorie foods because the body is rewarded by high levels of nutrients.

### **Conclusion**

A pregnant and nursing mom should look to avoid sugar and processed <u>refined food</u>. Hnina provides the ideal sweet tooth guilt free indulgence in their raw chocolate and sprouted nuts & seeds <u>truffles</u>, their raw chocolate <u>bars</u>, grab and go sprouted nuts & seeds in pure maple syrup <u>snacks</u>, and raw cocoa and sprouted nuts <u>spreads</u>. Each a dose of superfoods that does wonders for the health of both mom and baby. Guilt free gives no license for over indulgence and over eating. Moderation is key even with great ingredients and healthy sweeteners.

### **About Hnina Gourmet & Vanessa**

In the spring of 2010 Vanessa Hnina Morgenstern-Kenan became pregnant with twin girls. With a family history of diabetes, Vanessa was concerned with gestational diabetes, a high risk condition of multiples pregnancy. When the chocolate cravings hit, she knew that sugar would mean trouble. Vanessa, a French born, three master's degrees, former cosmetics executive at L'Oreal Paris and Los Angeles cosmeceutical company executive, sent her husband Ron in search of healthy chocolate. He scoured numerous gourmet and health food stores in LA, but found none. Either they were fancy gourmet chocolates which tasted alright but were loaded with sugar, milk, emulsifiers and other junk, or they were an attempt at healthy, but blaaah. It appeared that no one was making a commercially available, pure, healthy yet delicious gourmet chocolate.

Necessity being the mother of invention, and no necessity greater than a pregnant mother's food cravings, an invention was certainly in need. Vanessa, who knew her way around the kitchen and has the study rigor of a 10 year university student, began researching and experimenting. Her goal was to create the most uncompromisingly pure, healthy and delicious gourmet chocolate truffle on the market. No shortcuts taken, no expense spared. But chocolate alone was not going to be special enough. Since childhood, Vanessa loved her Tunisian and European grandmothers' sprouted nuts and seeds, and those were going to be featured heavily.

One of her principles was Purity. Keep it simple, don't fix nature if it is not broken, less means more, start with the best ingredients, stay out of their way and let them shine. By that summer, Vanessa's homemade truffles were taking shape as a pure and simple product with only a few ingredients, all certified Organic: Raw dark chocolate, sprouted nuts and seeds, raw honey and pure maple syrup for sweetening, vanilla bean and NOTHING ELSE. No dairy, refined sugar, preservatives, pesticides, GMO's, emulsifiers, wax, colorants, additives, processed ingredients of any sort; just five pure ingredients of the highest quality available and the most painstaking and uncompromising preparation.

Vanessa kept her precious creations close to her vest and wasn't much interested in sharing, but her best friend swiped one when Vanessa wasn't looking and her reaction was "OMG Vanessa, forget the cosmetics business, this is what you need to do, sell these chocolates. And by the way, I want to order 90 for my wedding." And that is how the HNINA story began.

Disclosure Statement: Hnina Gourmet provides this report and referenced resources for information purposes only. Statements have not been evaluated by the FDA. They are not meant to provide medical advice, diagnosis, or treatment, and do not replace professional medical advice from a medical doctor.

#### **Reviews**

"As an obstetric anesthesiologist, I am well aware of the challenge pregnant patients face to provide the best possible nutrients possible for their health and for baby. This is especially true for patients with gestational diabetes, a complication well on the rise in the past years, which can often be controlled by diet initially. What HNINA products offer is extremely helpful in this context! Nourishing food that not only brings all the benefits of dark chocolate and nuts to mom and baby, reduce cravings efficiently, but also very importantly protects you from exposure to pesticides, GMO and from the damaging effects of refined sugars. Unfortunately, as health practitioners, we are rarely made aware in our training of the benefits of proper nutrition. This article sheds light on the incredible assets of these nuts and chocolate. I personally have tried HNINA products and they were delicious...My coworkers also really enjoyed the treats!"

- Lior Levy, MD, Obstetric Anesthesiologist

"As a chemist and dad of four, I know everyone in my family has an innate craving for chocolate. Unfortunately, that craving is usually met with a sugary sweet piece of candy, not the real thing. To truly satisfy our need for chocolate and the nutrients that it provides, HNINA has become a staple of our diet....for life! More than chocolate, it's a nourishing food we all enjoy. Thanks HNINA."

- The People's Chemist, <a href="https://thepeopleschemist.com/">https://thepeopleschemist.com/</a>

"A critical component to the healthy development of a baby is the mother's nutritional intake during pregnancy and nursing. In my practice I see many such women and the compendium of knowledge in this report is invaluable for them. I appreciate the way in which the many scientific studies are briefly summarized while providing the ability to dig deeper into each research paper. It is ideal for busy moms and health professionals. In my specialty of Nutrition Response Testing it is evident that one size does not fit all and that what nourishes one person may trigger a negative response in another from a food sensitivity. There are so many chocolates on the market and Hnina is the only one I recommend to my patients and particularly to pregnant women. It is also the only chocolates I am able to eat, and the only chocolate my family tests well with. The purity of each Hnina product, the numerous options of not only the nut & seed combinations but the healthy sweeteners allows each person to make the smartest choices for their unique personal health needs."

- Dr. Eun Song, PhD, LAc, MS, BS, ACN, http://www.3angelshealthcenter.com

"The report is incredibly accurate and demonstrates the benefits of dark chocolate as well as nuts and seeds. Most importantly, it highlights the importance of keeping the ingredients pure and unprocessed. This is so incredibly rare in our over-processed society!!! The report reminded me of the amazing health benefits of such a delicious food! As for Hnina, it most definitely fulfills the benefits of both dark chocolate and nuts- you can taste the purity in every bite. It's totally worth spending a little extra to get the high quality Hnina offers. And it tastes amazing. I crave it every night after dinner and it satisfies the craving perfectly. You don't even need a lot- just a little taste- and it's perfect!"

- Karen Jacobs, P.A., <a href="http://drfeder.com/">http://drfeder.com/</a>