

80/20
SMART-TAPER
SPREADSHEET

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(V01.071216 - EXCERPTS)

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# **INTRODUCTION – THE FUNDAMENTALS**

### **EXCERPT...**

### THE CONCEPT OF TAPERING

In the context of a medication, tapering simply means to reduce the amount of medication a person is taking by a set amount over a set period of time, repeating this reduction until there is no medication remaining . . .

### WHY TAPER?

The primary reason to taper a medication is to avoid withdrawal symptoms. This manual does not discuss how benzodiazepines work and how they interact with the body's neurochemistry. There is a large amount of readily available information on these topics, and many who engage in a benzodiazepine tapering program are familiar with these and other related topics.

(To purposely keep matters simple, we refer to all the processes, the physiology, the pharmacology and the neurochemistry and related factors affected by benzodiazepines as the GABA system. GABA itself is short for gamma-aminobutyric acid. The system we refer to is the production and use of GABA by the body as a natural inhibitory chemical, the levels of which also affect excitatory chemicals such as a norepinephrine, serotonin, acetyl choline, glutamate and dopamine as examples.)

The key concepts to understand are that:

- 1) The use of a benzodiazepine affects the body's GABA system, which is the body's natural inhibitory system, and this also affects the body's excitatory system;
- 2) The higher the dose and the longer a benzodiazepine is used, the greater the change to the GABA system;
- A notable period of time is required for the body's GABA system to return to a normal healthy premedication level of activity once benzodiazepine dosage use is reduced and stopped, and;
- 4) This means that benzodiazepine dosages need to be reduced slowly to allow enough time for the GABA system to return to normal, if a benzodiazepine has been used at a high dose and / or for a long enough period of time.

In short, benzodiazepines affect your body's inhibitory system, which in turn affects its excitatory system. Both need time to adjust when the use of a benzodiazepine is planned to be curtailed and then stopped.



Reducing a benzodiazepine dose too quickly or all at once can lead to severe withdrawal symptoms as there will not have been enough time for the GABA system to adjust to the decreased level or absence of the benzodiazepine.

As many benzodiazepine consumers will often hear, never go "cold turkey."

Interestingly, a person who experiences any withdrawal symptoms when reducing the dose of a benzodiazepine is not so much experiencing symptoms of not taking enough of the medication, but rather, is experiencing signs of their GABA system making a clear statement that it has not had enough time to return to an appropriate level of functioning.

This perspective is at the core of the concept and purpose of tapering benzodiazepines.

The concept of tapering is not just one of taking a smaller and smaller amount of medication for the sake of doing as much. That is a description of how it is done.

The question becomes what is the *purpose* of tapering in terms of benzodiazepines? The core purpose of tapering is to give enough time for the body's GABA system to return to an appropriate level of functioning, with none to minimal symptoms.

### WHAT IS A LIQUID-BASED TAPER?

In a liquid-based taper, a tablet is dissolved in a measured amount of liquid such as water or whole milk. Then a small amount of the liquid, which contains medication, is discarded. One drinks the rest of the liquid and takes any remaining dose(s) for the day in normal tablet form. This process is repeated each day with a small amount of additional liquid being discarded each day, with each day's total amount of discarded liquid gradually increasing until there is none left to drink. At that point a full tablet has been tapered, and then a new tablet is used in the liquid to start tapering a new tablet. This process is repeated until all tablets have been tapered.

In more detail, a tablet of the minimum strength in which your benzodiazepine is available is dissolved in a liquid. Each day, an amount of liquid containing your medication is discarded, and the rest is swallowed, with any day's remaining dose taken in tablet form, called a **Dry Dose**.

This is repeated each day. On each day, the total amount of liquid that contains your medication that is discarded is increased. In fact, the amount by which the discarded portion increases is the same amount every day. Thus, as more days pass, the total amount of medication in the liquid being discarded increases, and, the amount of medication in the liquid that is consumed decreases.

This pattern repeats day by day, until all the liquid is being discarded. The only medication if any that is taken on such a day is in tablet form. At this point, a whole tablet of the minimum strength has been fully tapered. The next day, one takes a tablet of the minimum strength out of the amount of that day's total dose that would be taken by tablet form, and that new second tablet of the minimum strength is dissolved in liquid.

Here the process repeats itself until that second tablet of minimum strength has been fully tapered. Then one repeats the cycle as often as is needed until all tablets, one after another, have been fully tapered.

The liquid effectively is a carrier agent by which a benzodiazepine dosage can be easily and effectively reduced by very small decrements day by day, rather than by recurrent steep drops or "stepping." This



process is made even more precise and easy to follow by tapering just one minimum strength tablet at a time and taking the rest of a days' dosage(s) in tablet form.

Many use the term "titration" such as in the expression "water titration" to describe tapering a benzodiazepine using a liquid. This popular use of this phrase for tapering though is incorrect. Titration is largely a laboratory process that involves slowly adding one liquid to another liquid to learn the properties of the second liquid. The word "titration" is used incorrectly when used to describe tapering a medication when using a liquid as a carrier medium.

Technically, it is in fact impossible to titrate a benzodiazepine in terms of slowly tapering down the dose, whether by reducing the number of tablets or by using a liquid as a carrier medium.

## WHAT ARE THE ADVANTAGES OF A LIQUID-BASED TAPER?

- 1) No recurrent periods of the dose being suddenly stepped down. See **CHAPTER 5**;
- 2) No recurrent periods of an increased probability of withdrawal symptoms. See **CHAPTER 5**;
- 3) In turn this leads to a greater probability of success, and;
- 4) A liquid taper accommodates tapering of a single lowest strength tablet of a benzodiazepine if that is the only tablet strength being taken.

The method is suitable for tapering large doses one tablet at a time, and tapering the last small dose a person may be having difficulty quitting.

### THE SPREADSHEET

The advantages of a taper using a liquid as a carrier medium are suited to those who are sensitive to changes to their benzodiazepine dose or who are having trouble doing away with the last small amount of their dosage.

The question then becomes how does a person create a dynamic spreadsheet that shows exactly how much liquid to take containing their medication each day, and how much to discard, and how much to take in an additional dry dose(s) if the dosage is high, all in a controlled systematic way with no need to manually make mathematical calculations every day? In addition, there is the need to reduce the rate a person is tapering during the last 20% of his or her taper, as discussed in the next section, regardless of all the other mathematical parameters.

A spreadsheet is the logical answer. But creating one that takes into account the tapering of one minimum strength tablet being added to a liquid each day, and calculating exactly how much to discard, with the total dosage taken being made up of part liquid and possibly part tablets, is a big challenge. In addition, the spreadsheet has to be versatile enough to make the appropriate change to the initial taper rate for the last 20% of the taper, regardless of when that point is reached.

This is where BenzoTaper's 80/20 Smart-Taper Spreadsheet comes into its own, together with this manual. It does not matter what your starting dose is, when you start tapering, what benzodiazepine you are taking<sup>2</sup> nor at what rater per month you wish to taper; you simply input 7 variables and all information is provided to you on one single seamless spreadsheet.



### WHAT DOES "80/20" MEAN IN THE NAME OF YOUR SPREADSHEET?

When tapering a benzodiazepine, a person chooses a monthly rate at which he or she wants to reduce his or her medication intake. If for example a person is taking 20 mg of a medication and he or she decides to use a taper rate of 10%, then 2 mg of medication will be gradually reduced over each 30-day period. The math is his or her current dose of 20 mg multiplied by the desired taper rate of 10%, or, 20 mg x 10% = 2 mg.

This initial rate applies for the reduction of the first 80% of a person's dose. Once 80% of the dose has been reduced, it is necessary to decrease the taper rate by 50% for the last 20% of the dose. This is necessary as the body becomes more sensitive to decreases in medication during the last part of a taper.

In summary, in a benzodiazepine taper, the taper rate that is used for the first 80% of a dose needs to be cut in half for the last 20% of the dose. At BenzoTaper, we call this the 80/20 Rule. Building a spreadsheet that can incorporate this reduction on a seamless spreadsheet once 80% of a dose reduction has been reached, regardless of when it occurs, is a major step forward in creating a user-friendly seamless spreadsheet, with no need to perform any manual mathematical calculations.

### **OUR CORE FOCUS**

The design and construction of the 80/20 Spreadsheet and this accompanying manual is our core focus. The strength of a tapering spreadsheet used in a liquid taper is one of the main factors determining whether you will have a successful taper. For this reason, our 80/20 Smart-Taper Spreadsheet is what we are all about.

The 80/20 Smart-Taper Spreadsheet is the new home-based benchmark in liquid-based benzodiazepine tapering. It has a highly user-friendly interface requiring the input of just a few variables in one section. A highly versatile and user-friendly seamless tapering spreadsheet is produced. Withdrawal symptoms if any can be quickly addressed. An appropriate reduction in the taper rate during its last stage is automatically calculated, regardless of any changes that may have been made in the past.

BenzoTaper has observed the lack of consistent and readily available instructions on how to use tapering spreadsheets, and the cumbersome nature of tapering spreadsheets. Making a spreadsheet for tapering is one thing, but knowing how to use it and how to get the most out of it is another.

The focus of this manual is to empower the user the get the most out of the core tool: the spreadsheet. The manual maintains this focus by not delving into areas that are not directly related to benzodiazepine tapering. Its primary focus is on the process and the spreadsheet.

BenzoTaper is confident we have produced the new standard in liquid based benzodiazepine tapering – a package of a smart spreadsheet and a smart manual.

Dissolve here is used in its common meaning. If you take a tablet and place it in a liquid, it will break apart into smaller and smaller pieces. Shaking the container will help break it into even smaller pieces. In time the particles will settle out on the bottom of the container. What has been created is not a true solution, but rather a temporary suspension. As long as your medication will dissolve or break apart in water or whole milk, you may use it to taper. For more information, see CHAPTER 10, SECTION 2 – TERMINOLOGY: DISSOLVED, SUSPENSION AND SOLUTION.



2. All water dissolvable benzodiazepines work with the 80/20 Smart-Taper Spreadsheet. If a tablet of your medication will not dissolve in water as described in Note 1 above, do not attempt to use that medication to taper with the 80/20 Smart-Taper Spreadsheet. You may always consult your doctor to change your prescription to a benzodiazepine that will dissolve in water. See CHAPTER 2: SWITCH TO DIAZEPAM.

... END OF EXCERPT

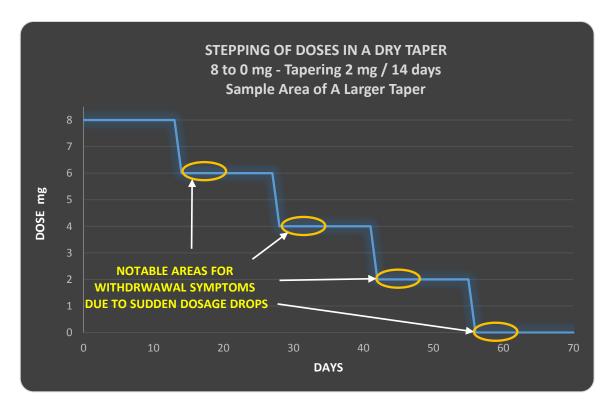


# **CHAPTER 5: GRADUAL vs. STEEP DROPS**

EXCERPT...

### DRY DOSE TAPERING AND STEPPING

Dry taper methods rely upon medication being taken in tablet or pill form by mouth. This is called a **Dry Dose**. Gradually the dose is decreased by lowering the number of tablets taken. If using Diazepam for example, the smallest downward taper is 2 mg. Many people have a notable sensitivity to small changes in their daily does, such that 2 mg decreases all at once can be too large a drop. This allows for an increased probability of withdrawal symptoms appearing after each decrease.



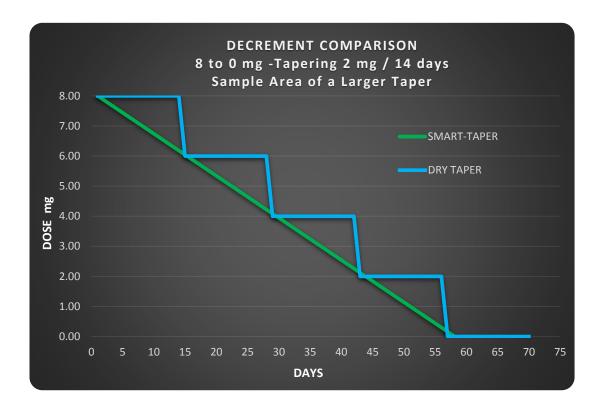
**FIGURE 5.1 STEPPING OF DOSES IN A DRY TAPER** - A section of an actual dry taper covering 8 mg. The blue line clearly shows the recurring areas for increased potential withdrawal symptoms due to the sharp 2 mg downward steps or "stepping." Notice how these areas occur repeatedly.



In addition, each decrement in a Dry taper is not gradual, but occurs all at once, producing a steep sudden drop in medication. A user is effectively stepping down their dosage rather than slowly and evenly decreasing it day by day. This is what can lead to the recurring pattern of increased potential for withdrawal symptoms. See **Figure 5.1 STEPPING OF DOSES IN A DRY TAPER** above.

### SMOOTH CONTINUOUS DECREASES WITH A LIQUID TAPER

Unlike the repeated pattern of steep drops or stepping that occurs in a dry taper regime, a liquid taper allows for a smooth continuous taper. In a liquid taper there is no stepping or a sudden steep decline in medication. The decrements in a liquid taper using the 80/20 Smart-Taper Spreadsheet are gradual and small on a day to day basis. The decreases are smooth and continuous, and, though small day by day, add up to a highly controlled taper. This approach greatly diminishes the probability and severity of withdrawal symptoms. See **FIGURE 5.2 DECREMENT COMPARISON** below.



**FIGURE 5.2 DECREMENTAL COMPARISON** - The smooth gradual decline of a liquid based Smart-Taper in green compared to the stepped decreases of a dry taper in blue. A liquid taper allows for decrements to 1) be extremely small and 2) occur at an even pace, rather than in quick downward steps. The benefit is that with no sudden and regular drops in medication, the probability of withdrawal symptoms appearing is greatly diminished. Graph is a selected 8 mg area of tapering in a larger taper, and does not cover the last 20%. It is based on actual data from a recommended dry taper at a rate of 2 mg every 14 days. The liquid taper is based on the same Taper Rate over the same time period. This is a sample Taper Rate only and may not be appropriate for you.



## ADVANTAGES OF THE 80/20 SMART-TAPER OVER A DRY TAPER

- 1. Each decrement is equal.
- 2. Decrements are small but add up over time to equal an equivalent dry dose taper.
- 3. Small decrements mean less likelihood of withdrawal symptoms.
- **4.** If withdrawal symptoms do appear, they are slow to emerge, especially if tapering Diazepam.
- 5. Slow emergence of any withdrawal symptoms are easy to address quickly.
- **6.** Decrements are automatically cut in half for the last 20% of a taper. See **CHAPTER 7: THE 80/20 RULE & FEATURE**.

## ... END OF EXCERPT





# **CHAPTER 6: TAPER RATES**

## EXCERPT...

A **Taper Rate** is a main factor in determining how smooth your taper will occur. It is the primary factor that needs to be changed if withdrawal symptoms do emerge, whether the symptoms be trivial or severe, or, if you have no withdrawal symptoms and want a shorter taper.

### WHAT IS A TAPER RATE?

A Taper Rate is the percentage of your **Starting Dose** by which you want to reduce your medication intake, expressed over a 30-day period.

The term **Starting Dose** refers to the usual total daily amount of medication a person takes each day before beginning a taper. An easy way to remember this is that a person's **Starting Dose** is the total medication that would normally be taken at the start of a taper.

An example is the best way of illustrating the definition of a Taper Rate. Let's assume Robert is taking 24 milligrams a day of Diazepam. This is his usual total daily dose, or his **Starting Dose**.

Roberts decides to start a taper. His **Starting Dose** is 24 mg. Let's assume he chooses a Taper Rate of 10%. Here is the math for Robert's Taper Rate:

## STARTING DOSE x TAPER RATE 24 mg x 10% 2.4 mg

His Taper Rate is said to be **10%**, as that is the percentage of his **Starting Dose** by which he will be reducing his intake of medication over a 30-day period.

<u>Taper Rates in this manual always refer to a 30-Day period</u>.

If a person has a 15% Taper Rate, that person is reducing 15% of his or her **Starting Dose** every 30 days. With a Taper Rate of 25%, that person is reducing his or her **Starting Dose** 25% every 30 days.

Back to Robert. With a **Starting Dose** of 24 mg and a Taper Rate of 10%, we know that he will be reducing his medication intake by 2.4 mg every 30 days.

This does **not** mean that once every 30 days his medication intake will suddenly drop by 2.4 mg. Rather, he will gradually reduce his medication by a small amount each and every day, so that over each 30-



day period, all those daily reductions will add up to 2.4 mg. Doing this over multiple 30-day periods, Robert will eventually be taking no medication at all.

We can go further and figure out by how much Robert will be reducing his medication every day. The answer is to take his 30-day reduction amount, or 2.4 mg, and divide it by 30 days:

### $2.4 \text{ mg} \div 30 \text{ days} = 0.08 \text{ mg/day}$

Fortunately, you do not have to worry about this calculation when referring to your Taper Rate nor calculate it. It is all done by the 80/20 Smart-Taper Spreadsheet.

Note that Robert will be reducing his medication every day in small 0.08 mg amounts, adding up to 2.4 mg over each 30-day period. Contrast this to how a **Dry Dose Taper** works with repeated comparatively large drops occurring every few weeks rather than gradually with a liquid taper.

### TAPER RATES AND LIQUID-BASED vs. DRY DOSE TAPERS

In Robert's liquid based taper, his reduction is gradual, occurring day by day. In a **Dry Dose Taper**, the decreases in medication happen several weeks apart, and all at once. This method produces sudden steep drops, sometimes called "stepping."

The disadvantages with a Dry Dose Taper are that there is:

- 1) A greater potential for withdrawal symptoms appearing with each sudden step down in dose, and;
- 2) A greater potential for a failed taper.

These concepts are the key differences between a liquid-based taper and a **Dry Dose Taper**. See **CHAPTER 5: GRADUAL vs. STEEP DROPS** for more detail.

### TAPER RATE DETERMINING FACTORS

When considering what Taper Rate to use, take into account the following 4 factors:

- 1. Length of time you have been taking a benzodiazepine:
  - a. The greater the amount of time, the lower the Taper Rate;
  - b. The lesser the amount of time, the higher the Taper Rate.
- 2. The length of the half-life of your benzodiazepine:
  - a. The greater the half-life, the higher the Taper Rate;
  - b. The lesser the half-life, the lower the Taper Rate.
- 3. Amount of the dose you have been taking:
  - a. The greater the dose, the higher the Taper Rate;
  - b. The lesser the dose, the lower the Taper Rate.



### 4. If any, withdrawal symptoms and frequency during the taper:

- a. None to mild occurring occasionally equates to a correct Taper Rate;
- b. Irritating to severe on a frequent basis equates to too high a Taper Rate.

Using Robert's scenario, we know that his Taper Rate is 10%, and that rate for his **Starting Dose** equals a decrease of 2.4 mg every 30 days.

If he were to double his Taper Rate to 20%, he would be reducing his medication by 4.8 mg every 30 days ( $2.4 \text{ mg} \times 2$ ).

If he were to cut his original 10% Taper Rate in half to 5%, he would be reducing his medication by 1.2 mg every 30 days (2.4 mg  $\div$  2).

The subject of a correct Taper Rate is controversial as so many different credible sources give different rates that are often far apart. The goal of not having any withdrawal symptoms without the Taper Rate being unnecessarily low is the ideal Taper Rate. A correct Taper Rate is highly individualized. Though it sounds too generalized, the best Taper Rate for you is the one that produces none or trivial and infrequent withdrawal symptoms.

### In summary:

- 1. The lower a Taper Rate, the smaller and thus slower is the reduction of the amount of medication each day and over each 30-day period.
- 2. The higher a Taper Rate, the greater and thus faster is the reduction of the amount of medication each day and over each 30-day period.

### **INPUTTING YOU TAPER RATE**

In the 80/20 Smart-Taper Spreadsheet, click on the tab called **YOUR\_DATA** & you will see an area to enter your Taper Rate. Enter a whole number without the "%" sign and hit **<Tab>** or **<ENTER>**.

MEDICATION NAME	
START DATE	
GRADUATE CYLINDER SIZE ml	
TAPER RATE	
STARTING DOSE mg	
LOWEST TABLET STRENGTH mg	
WHOLE NUMBER TEST	
WHOLE MOINIDER 1531	
DO YOU WANT DATES? YES or NO	

### WHAT TAPER RATE SHOULD I USE?

Despite there being no hard rules or guidelines on the correct Taper Rate, you have peace of mind knowing that with the 80/20 Smart-Taper Spreadsheet you can easily increase or reduce your Taper Rate during a taper. The ease with which this can be done is one of its powerful advantages.



INCREASE YOUR TAPER RATE	DECREASE YOUR TAPER RATE
See CHAPTER 12, SECTION 1	See CHAPTER 14, SECTION 2, PART 2

## ... END OF EXCERPT



# **CHAPTER 7: THE 80/20 RULE AND FEATURE**

## EXCERPT...

### A SLOWER TAPER RATE AT THE END IS NEEDED

It is widely accepted that when tapering benzodiazepines, the last 20% of the **Starting Dose** to be tapered is often the most challenging portion. This last stage gives rise to the highest probability of withdrawal symptoms. Why? Experience shows that because there is only 20% of the **Starting Dose** left, the **Taper Rate** used for the first 80% is often too rapid for the last 20%. Thus the **Taper Rate** needs to be cut in half once 80% of the **Starting Dose** has been tapered.

BenzoTaper calls this the 80/20 Rule.

The 80/20 Smart-Taper Spreadsheet recognizes the need for a slower **Taper Rate** once you have tapered 80% of your medication. It automatically calculates the data for the remaining days. Having this occur on the 80/20 Smart-Taper Spreadsheet, regardless of the variable lengths of individual tapers, together with the spreadsheet's other features, is a major achievement, making tapering schedules more user-friendly than ever.

The numbers "80/20" refer to the two main stages of a taper plan. They are:

- 1. The first 80% of a person's original **Starting Dose** to be tapered, and;
- 2. The last 20% to be tapered.

### THE 2 MAIN STAGES OF A TAPER

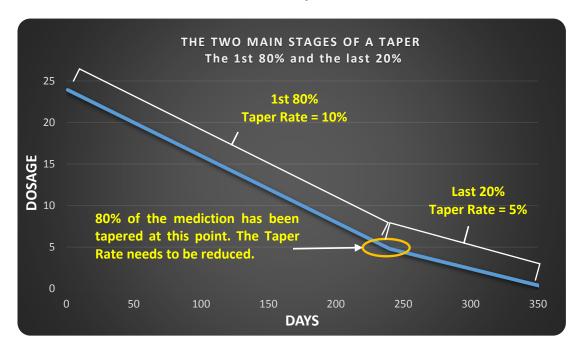
To have a clear understanding of what the two main stages described above represent, let's assume a person is taking 24 milligrams (mg) of Diazepam per day and is about to start a taper. The two main stages of the taper look like this:

1st Stage = Starting Dose  $\times$  80%, which is 24 mg  $\times$  80% = 19.2 mg

**2nd Stage** = **Starting Dose**  $\times$  20%, which is 24 mg  $\times$  20% = 4.8 mg

Below is **FIGURE 7.1 THE TWO MAIN STAGES OF A TAPER** that gives a clear visual demonstration of these stages.





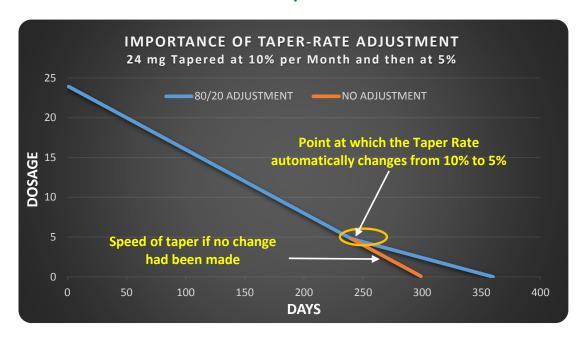
**FIGURE 7.1 THE TWO MAIN STAGES OF A TAPER** - The first stage is 80% of the original dose, tapered in this example at 10% per month. The 2<sup>nd</sup> stage is the remaining 20% tapered at half the original rate, or, 5%. The Taper Rates are examples only and may not be appropriate for you.

## TWO MAIN ADVANTAGES OF THE 80/20 SPREADSHEET AND THE 80/20 RULE

Two main advantages of the 80/20 Smart-Taper Spreadsheet in relation to the 80/20 Rule are that:

- 1. The reduction of the **Taper Rate** for the last 20% of your taper is calculated automatically. There are no manual calculations to be done. The liquid-based 80/20 Smart-Taper Spreadsheet is able to make spreadsheet adjustments regardless of the point at which an 80% taper is achieved and when the remaining 20% of the taper begins.
- 2. Even though the last 20% of a taper will have a rate that is half of what it was for the first 80% of the taper, all the data for the taper stays in one seamless spreadsheet from start to finish. This is called the 80/20 Feature. This feature makes automated adjustments, even if you increase or decrease your Taper Rate, or pause your Taper. There are no multiple sets of data to carry over to recurring multiple tabs as there is with some spreadsheets.





**FIGURE 7.2 IMPORTANCE OF TAPER RATE ADJUSTMENT** - The 80/20 Smart-Taper Spreadsheet reduces the Taper Rate in half for the last 20% of a taper. The red line represents how fast the taper would have proceeded without this adjustment, leading to an increased potential for withdrawal symptoms. Notice the difference in the number of days between the end point of the lines. Finishing the last 20% of a taper at the same rate as the 1<sup>st</sup> 80% would result in too fast a final taper, not allowing enough time to adjust to the decrease of medication during this second stage of tapering. The Taper Rate is an example only and may not be appropriate for you.

Here is a portion of the actual data for the above chart. The 80% taper point is marked in yellow, demonstrating numerically the **80/20 Rule** adjustment built into the spreadsheet.

	1	2	3	4	5	6	7	8	9
DATE	DAY	LOWEST STRENGTH TABLET	DISCARD	DRINK	MEDICATION BY TABLET	Mg TAKEN BY LIQUID	TOTAL Mg IN LIQUID + TABLETS	Mg REDUCTION	PERCENT REDUCTION
		# of TABLETS	ml	ml	mg (NOT # of tablets)	mg	mg	mg	%
25-Aug	237	1	48.0	52.0	4.00	1.04	5.04	18.96	79.00
26-Aug	238	1	52.0	48.0	4.00	0.96	4.96	19.04	79.33
27-Aug	239	1	56.0	44.0	4.00	0.88	4.88	19.12	79.67
28-Aug	240	1	60.0	40.0	4.00	0.80	4.80	19.20	80.00
29-Aug	241	1	62.0	38.0	4.00	0.76	4.76	19.24	80.17
30-Aug	242	1	64.0	36.0	4.00	0.72	4.72	19.28	80.33
31-Aug	243	1	66.0	34.0	4.00	0.68	4.68	19.32	80.50

At the 80% mark the Taper Rate is cut in half. Notice that the values in the indicated columns after the highlighted row are reduced by half of what they were before reaching the 80% mark. Having this occur on one spreadsheet is a huge advantage of the 80/20 Smart-Taper Spreadsheet.



Remember the example of Robert? He was tapering 24 mg at a **Taper Rate** of 10% per month. At the point 80% point of his taper with 20% remaining there would be the equivalent of 4.8 mg of medication remaining. Here's a reminder of the math for the stages for his taper:

1st Stage = Starting Dose  $\times$  80%, which is 24 mg  $\times$  80% = 19.2 mg

**2nd Stage = Starting Dose** x 20%, which is 24 mg x 20% = 4.8 mg

When you saw that second dosage number of 4.8 mg to start the 2<sup>nd</sup> stage of his taper, you probably thought, "If he were doing a dry taper, how would he be able to make up a dose using tablets that exactly equal 4.8 mg?" The answer is that it would be extremely difficult. But with a liquid-based taper and the 80/20 Smart-Taper Spreadsheet, it's is easily achieved with no effort.

Here's the sample area for Robert's Smart-Taper Spreadsheet using the dosage and **Taper Rate** above, showing the 80% taper point, after which the 2<sup>nd</sup> part of the taper begins. The **Taper Rate** changes to half the original rate at this point, highlighted in yellow below:

DATE	1 DAY	2 LOWEST STRENGTH TABLET	3 DISCARD	4 DRINK	5  MEDICATION BY TABLET	6  Rx  Mg TAKEN BY LIQUID	7 TOTAL Mg IN LIQUID + TABLETS	8 Mg REDUCTION	9 PERCENT REDUCTION
		# of TABLETS	ml	ml	mg (NOT # of tablets)	mg	mg	mg	%
25-Aug	237	1	48.0	52.0	4.00	1.04	5.04	18.96	79.00
26-Aug	238	1	52.0	48.0	4.00	0.96	4.96	19.04	79.33
27-Aug	239	1	56.0	44.0	4.00	0.88	4.88	19.12	79.67
28-Aug	240	1	60.0	40.0	4.00	0.80	4.80	19.20	80.00
29-Aug	241	1	62.0	38.0	4.00	0.76	4.76	19.24	80.17
30-Aug	242	1	64.0	36.0	4.00	0.72	4.72	19.28	80.33
31-Aug	243	1	66.0	34.0	4.00	0.68	4.68	19.32	80.50

There is that 4.80 mg from the math about Robert's taper. The 80/20 Smart-Taper Spreadsheet easily allows for exact dosing. And the figure shows up exactly at the 80% mark shown in the far right column.

## ... END OF EXCERPT



•:	QUICK REFERENCE GUIDE 80/20 SMART-TAPER SPREADSHEET
	<ul> <li>COLUMN 1 - DAY</li> <li>Day number of your taper starting at 1, increasing each row</li> </ul>
	<ul> <li>COLUMN 2 – LOWEST STRENGTH TABLET</li> <li>Dissolve only the Lowest Strength Tablet in which your medication is available</li> <li>Only taper 1 tablet at a time in the same dose before tapering in another dose</li> <li>Shows a Cycle Point when text NONE is displayed</li> </ul>
	<ul> <li>COLUMN 3 – DISCARD</li> <li>The amount of solution to discard from your mixing container</li> </ul>
	<ul> <li>COLUMN 4 - DRINK</li> <li>Amount of solution to drink after discarding the amount in Column 3</li> </ul>
Rx	COLUMN 5 – MEDICATION BY TABLET  Expressed in milligrams (mg); NOT number of tablets  The amount in milligrams of medication to take in dry tablet form
Rx	COLUMN 6 - Mg TAKEN IN LIQUID  • Number of milligrams in the liquid in Column 4
$\overline{\mathbb{Q}}$	<ul> <li>COLUMN 7 - TOTAL mg IN LIQUID + TABLETS</li> <li>The amounts in milligrams in Column 5 &amp; 6 added together</li> </ul>
	COLUMN 8 – Mg CUMMULATIVE REDUCTION  • Your Starting Dose from the sheet YOUR_DATA minus the amount in Column 7
%	COLUMN 9 – CUMMULATIVE REDUCTION PERCENTAGE  • Column 8's figure as a percentage of your Starting Dose
	<ul> <li>30-DAY MARKERS</li> <li>Horizontally highlighted in yellow showing 30-day periods</li> </ul>



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