What is Nutritional Ketosis?
Unlike the dangerous state of diabetic ketoacidosis, nutritional ketosis is a natural metabolic state that enables the body to efficiently use fat as a primary source of energy instead of glucose. When shifting into ketosis, one becomes a “fat burner” instead of a “sugar burner,” relying on fat as the primary cellular fuel. Ketones are produced as a byproduct of fat metabolism, and nutritional ketosis is defined by measuring blood ketones between 0.5 and 5.0 mmol/L.

What is the Ketogenic Diet?
One way to shift into a state of nutritional ketosis is by following the ketogenic or “keto” diet, a low carbohydrate, moderate protein, high fat diet that involves replacing most dietary carbs with fat. A general macronutrient ratio ranges between 60-85% of calories from fat, 15-35% of calories from protein, and 5-15% of calories from carbs. The drastic reduction in carbs forces cells to shift their energy source from glucose to fat, thus putting the body into a ketotic, fat-burning state.

Clinical Use of Nutritional Ketosis
The ketogenic diet has been used as a clinical therapeutic tool since the 1920’s to treat epilepsy in children, and has gained a resurgence of interest in recent years due to the wide range of conditions it can positively impact. For example, research has shown ketosis to benefit:

- Weight loss
- Mood stabilization*
- Hormone regulation*
- Increased HDL (“good”) cholesterol*
- Slowed aging*
- Blood sugar regulation*
- Memory and Cognitive Improvement*

Studies also show that ketosis can help certain health conditions such as Obesity and Hyperlipidemia*, Epilepsy*, Alzheimer’s Disease*, Cancer*, Acne*, PCOS*, Cardiovascular Disease*, Autism*, Metabolic Syndrome*, Fatty Liver Disease* and others.

*See research studies in original article: drpompa.com/additional-resources/health-tips/ketogenic-diet.
Troubleshooting: Common Beginner Mistakes

Many people eagerly begin the ketogenic diet, but give up shortly thereafter due to lack of results. I’ve observed these common mistakes to be avoided for keto success:

• Excess protein consumption (beware of gluconeogenesis, where excess protein is converted to sugar and stored as fat)
• Excess caloric intake (strategic calorie restriction and intermittent fasting is key)
• Not consuming enough healthy dietary fat (if enough fat is consumed one shouldn’t feel uncomfortable hunger or cravings)
• Not accounting for all carbs (food journaling can provide accountability)
• Too much or too little physical activity (properly timed burst training is best for rapid fat-loss and hormone optimization)

Also, look out for underlying health conditions, and ALWAYS remember R1: Remove the Source if someone is “doing everything right,” and still lacking results.

My tricks for accelerating and maintaining fat adaptation and ketosis

If you’re having trouble getting into or maintaining ketosis, I’ve found these tips and strategies to work very well for myself and clients.

Carb Phasing:
To jumpstart ketosis, carefully count carbs and slowly re-incorporate as follows:

**Week 1:** Eat less than 10 grams of carbs per day
**Week 2:** Eat less than 20 grams of carbs per day
**Week 3:** Eat less than 30 grams of carbs per day
**Week 4:** Eat less than 40 grams of carbs per day
**Week 5:** Eat less than 50 grams of carbs per day

2-2-2 Rule (consume each daily)
Adequate good fat and electrolyte balance is vital, and this rule helps to cover the bases.

• 2 tbsp. of coconut oil, MCT oil or a combination
• 2 tbsp. of organic grass fed butter, ghee, X-Factor brand butter oil, or a combination
• 2 tsp. of sea salt, can be added to bone broth or taken with water throughout the day.
• Optional: 2 cups of grass-fed bone broth (or more if desired)

Diet Variation:
I like to maintain ketosis most of the time; however, I’ve found that strategically altering my diet, what I call “diet variation,” enhances and accelerates results. I teach diet variation as an ancient healing strategy because our ancestors were forced to vary their diet. They went into ketosis during harsh winters and involuntarily fasted during famine. During warmer months, fresh produce was available and enjoyed in abundance. Over the years, I’ve observed the magic is in the variation.
**5-1-1 Rule:**
Diet variation is the idea behind the 5-1-1 rule, but it can be modified to suit anyone’s lifestyle and health condition.

- 5 days per week follow the ketogenic diet (or cellular healing diet)
- 1 day per week enjoy a “feast” day, for healthy carb or protein loading (still avoiding “junk” food)
- 1 day per week do a 24-hour water fast (drinking only water from dinner to dinner)

**Fat Fasting:**
Consuming nothing but clean fat (and water) for 1-3 days can be an effective reset to jump start fat burning. Examples include organic coconut oil, MCT oil, extra virgin olive oil, hemp oil and grass-fed butter or ghee, butter oil (plus sea salt for electrolytes).

**Exogenous Ketones:**
Man-made ketone supplements may be a helpful crutch if one is struggling to get into ketosis, for athletes or others seeking to boost mental and physical performance, or as a therapeutic tool. The verdict is still out on long-term use, but they have a place as a beneficial support. Bottom line: Supplemental ketones are a shortcut to ketosis, a gift from science. However, for the “real deal” ketosis, cells must be trained naturally to burn the body’s own fat for energy which takes time and effort.

**Support Therapies:**
- True Cellular Detox™
- Butyrate, coffee, and probiotic enemas
- Higher doses of BIND (activated charcoal)
- Infrared sauna
- Magnesium sulfate for constipation (epsom salt)
- Vitamin C flush

**Support Supplements:**
- Bile Salts from Body Bio
- PTM for potassium balance
- Oxbile and lipase for fat digestion
- Branch Chain amino acids (help body keto-adapt and repair/maintain muscle)
- Carnitine (fat burning and assists keto-adaptation)
- Electrolyte replacement (Elyte from Body Bio replaces electrolytes)
- Glutamine (exercise recovery and keto-adaptation)
- Liver and kidney support (L liver and Ks kidney)
- Vitamin D (Systemic Formulas DV3)
- MCT oil (c8 form of MCTs are more ketogenic and easier on the gut
- Regular probiotic rotation and fermented foods for gut support (MBC, ABC, Prescript Assist, Prephage, Probiophage)

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**Keto Convenience Foods:**
Canned sardines, oysters, sockeye salmon, mackerel and anchovies (in olive oil and sea salt), raw macadamia nuts, roasted nori seaweed snacks, hard-boiled or deviled eggs, raw coconut butter, avocados, homemade fat bombs (see recipe idea below), grass-fed cheese/yogurt, guacamole with EPIC pastured pork rinds or bacon “chips”, sugar-free jerky, high-fat smoothies and puddings, homemade stevia sweetened popsicles, grass-fed whey protein powders, Bulletproof and EPIC bars.

**Meal Ideas:**

**Breakfast:** organic coffee or tea with grass-fed butter or cream (if intermittent fasting) OR egg omelet fried in avocado oil with drizzle of MCT oil topped with avocado; coconut milk smoothie; eggs baked in avocado halves; chia seed pudding; full fat yogurt with raw nuts; almond or coconut flour keto pancakes

**Lunch:** Leafy greens salad topped with canned sardines and capers, dressed with olive oil and apple cider vinegar; mashed hard boiled eggs and avocado in lettuce wraps with blanched asparagus spears and bleu cheese dip; Zucchini noodles (“zoodles”) with fresh mozzarella, pine nuts and olive oil.

**Dinner:** Baked sockeye salmon with sautéed spinach and mashed cauliflower “potatoes”; Slow-cooker grass-fed roast with onions and side of roasted brussel sprouts; Roasted spaghetti squash with bison meatballs and side salad; Pureed vegetable soup with heavy cream and side of crusty keto bread.

**Sweets:** Keto fudge, cookies, fat bombs, puddings, popsicles, organic berries

**Resources:**
Books:
Thomas Seyfried’s “Cancer as a Metabolic Disease”
Jeff Volek & Stephen Phinney’s “The Art and Science of Low Carbohydrate Performance”

**Articles on drpompa.com:**
The Ketogenic Diet: An Answer for More than Weight-Loss Resistance
Troubleshooting the Ketogenic Diet: Q & A
Diet Variation

**Cellular Healing TV Podcasts (podcast.drpompa.com):**

>> [Episode 94 with Prof. Thomas Seyfried](#)
>> [Episode 98 with Dr. Dominic D'Agostino](#)
>> [Episode 104 with Dr. Jeff Volek](#)
>> [Episode 105 with Ben Greenfield](#)
>> [Episode 112 with Dr. Jason Fung](#)
>> [Episode 133 with Jimmy Moore](#)
Recipe: Chocolate Almond “Fat Bombs”
Makes about 12 treats

Ingredients (organic when possible):
1 cup melted, cold-pressed coconut oil
1/2 teaspoon vanilla extract
1 tablespoon Stevita stevia sweetener
½ to 1 teaspoon sea salt
4 tablespoons unsweetened cocoa powder
½ cup raw almond butter
2 tablespoons grass-fed butter
Add-ins – almonds, unsweetened shredded coconut
Paper cupcake liners

Preparation:
Mix all ingredients in a food processor until smooth.
Pour mixture into paper cupcake liners.
Sprinkle in almonds (whole or sliced), berries, coconut shreds, or toppings of your choice.
Top with a touch of sea salt.
Refrigerate until solid and store in the fridge.

See if you qualify to connect with Dr. Pompa and Dr. Mercola.
>> SCHEDULE YOUR FREE QUALIFICATION CALL

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