



***Nutrition for Performance
On and Off the Bike***



We believe that one of the other “pillars” of Enduro racing and MTB riding performance is, nutrition.

Just like you’ve probably heard all your life, “You are what you eat,” and if you’re like some of the pro athletes that I’ve worked with, you definitely have room to improve!

I mean, “Red Bull” and pizza simply won’t cut it if you want to perform at your highest levels!

Performance starts in the cell, because that’s where energy production begins, and the cell is fed by what you put in your mouth. If you constantly put junk in your mouth, then your body is going to give you what you put in!

I mean think about it... if you are like the average American, you’re eating some of the energy and performance-zapping foods like:

1. Soda- A 20-ounce soda has 16 teaspoons of sugar. The average American consumes **45 gallons of sugary drinks a year**. That’s 39 pounds of sugar -- about as much as a 5-year-old child weighs!
2. Sugar- 150 pounds of sugar a year!
3. White flour- up to 108 pounds annually!

And you wonder why our society is so obese and why Diabetes and cancers are on the rise!

So here’s the deal... we encourage you to use this manual to either radically change your eating habits and lifestyle around them, or to fine tune where you’re presently at. If you use this manual and make these suggestions part of your lifestyle habits, not only will your body be happier, but you’re energy will go up, you’re riding and training performance will go up and you will be able to ride longer and harder than you ever have!

Now, if you are looking for a specifically created Enduro racing or MTB riding nutrition program specifically created for you and your needs, go to

<http://www.apexnutritionllc.com/fuelrightblog/shop/>

Here you will find a couple options you can make to get exactly what you need. Since you’re getting the basics here, we recommend you go with the “Custom Nutrition Plans,” or the, “Ongoing Coaching,” program. Kelli Jennings is a consummate professional for mountain bike athletes and will take great care of you!



Rules for snacks and meals:

1. Include a Protein Source at each meal.

Protein is everyone's answer to lean muscle and a high metabolism, and for maximum performance on and off the course.

Eating protein at every meal and for snacks will help to control your blood sugar levels and leave you feeling full and energetic throughout the day.

One of the biggest mistakes people make in their eating is they don't include enough protein at each meal (some people even go all day without ANY protein) and especially before and after a ride or race!

Your protein sources will include grass fed meats, poultry, organic eggs, and wild fish. (A detailed list can be found below.)

2. Include a Healthy Fat Source at each meal.

Unfortunately many people have been falsely led to believe that fat is making them fat. Well this is only partially true.

It is the hydrogenated, highly processed, trans fats and unnatural fats that are making everyone fat and perform poorly. Healthy fats (that are found in nature) actually help your body burn fat as a main fuel source. Your healthy fat sources will include: extra virgin olive oil, extra virgin coconut oil, all nuts (except for peanuts and cashews), raw butter, avocados, and the fats naturally found in whole organic eggs and meats. (A detailed list can be found below.)

3. Include a Fibrous and Complex Carbohydrate at each meal.

You do not need to go on a low carbohydrate diet to get lean, you just need to choose the *right* carbohydrates to burn tons of fat off your body (and keep it off). Not only will a serving of fibrous carbohydrates (fruits and vegetables) give you the energy and vitamins and minerals you need.

Your healthy fibrous carbohydrate sources will include:

- All vegetables
- All fruits (in their natural form - no juices)
- Your Complex Carbohydrate sources will include: Brown Rice, Oatmeal, Millet, Quinoa, sweet potatoes and Beans, etc.



4. Eat every 2-3 hours, totaling 5-7 meals each day.

Fueling your body consistently during the day keeps your metabolism cranking all day long. I am not suggesting you gorge yourself with food until you feel overly full – just eat several small, well-portioned meals.

A sample eating time schedule may be: 8am, 11am, 1pm, 4pm, 6pm, 8pm. You won't feel hungry when you are consistently fueling your body the right way for max performance.

5. Drink ½ of your Body Weight in clean water each day.

Most people who are suffering from digestive disorders, headaches, muscle and joint pains and obesity are really just extremely dehydrated and can quickly remedy some of their symptoms just by drinking an adequate amount of water each day!

Drink a minimum of ½ of your bodyweight in ounces of clean water each day (that means no tap water). So a 200 lb person should be drinking 100 ounces of water each day. If you drink coffee, you need to add 8 ounces of water for every cup of coffee you have.

6. Avoid all Processed Non-Foods

I call most processed foods “non-foods” because the ingredients label describes more of a science experiment than anything that can be called a food.

It is these processed, toxic foods that are keeping and making our country so fat. This includes packaged cakes, cookies, frozen meals and so called “health bars.” Chances are if a product has a long shelf life, it has been infused with a high amount of toxic substances to keep it there. And do you know what these toxic substances do to your body? One, they can zap your energy! The other is, is that it can actually decrease your performance and drastically affect your life!

7. Eliminate all processed sugar and artificial sweeteners

Refined sugar causes weight gain and is one of the leading causes of obesity in the world. Sugar is also extremely addictive (causing feeling of highs and lows in the body similar to most drugs). People who are “on” sugar crave it all the time. People who are “off” sugar, don't even miss it.

Unfortunately, many times when people decide to give up sugar, they quickly resort to artificial sweeteners, but artificial sweeteners are not the answer. Sorbitol, saccharin (the “little pink bags”), aspartame (the “little blue bags”) and sucralose (the “little yellow bags”) may actually be worse for you than sugar itself.

Artificial sweeteners cause weight gain by disrupting your body's natural hormones. So it is equally as important to eliminate any food that contains the above mentioned sweeteners. (A detailed list on how to find sugars and sweeteners in your foods is found below).

A great alternative to sugar and artificial sweeteners is the supplement STEVIA.

It can be found at any health food store and online.

Visit www.steivasweetener.com.



8. Eliminate all Wheat from your meal plan if you experience negative effects to wheat

Most people are highly intolerant to wheat and wheat containing products. This is confirmed by the high prevalence of irritable bowel syndrome, chronic constipation and conditions such as gluten intolerance and Crohn's disease.

You may not necessarily be "allergic" to wheat (where you would have a severe reaction) but you may be highly intolerant to it (where you always feel bloated, suffer gastrointestinal distress, or just can't get that pooch in your lower abs to go away).

When people eliminate wheat from their diets the results are miraculous. They are able to achieve a lean body in a shorter amount of time and feel much healthier and energetic in the process. Wheat containing products are most breads, baked goods, cereals, cookies and crackers. (A detailed list can be found below.) And are found in the "center" of the grocery store in boxes.

9. Do not microwave your food.

Avoid using a microwave. While this opinion is controversial, I believe that microwaving food is not healthy for the body. And anything unhealthy for the body can put an incredible amount of stress on your digestive system and your liver. Without these organs and organ systems functioning properly, it becomes extremely difficult for your body to eliminate and metabolize toxins well, and when this happens, it can actually show up as lower back pain!

10. Include a high quality Omega 3 supplement in your meal plan.

Healthy fats in wild fish and nuts like walnuts are some of the best oils for the human body. Unfortunately we would have to consume a large amount of salmon and walnuts everyday to get the necessary amounts. An easier approach is to supplement your meal plan with a high quality Omega 3 supplement. (A list of high quality Omega 3 sources can be found below.)

11. Designate one "Reward" day per week.

A wonderful benefit to your cheat meal is that you will never feel deprived. If you want some cake, just have it. If you are following all of the above principles on a consistent basis, then enjoy a day a week where you eat what you want!



A Point to Consider:

***Keep pasteurized dairy to a minimum**

Some people tolerate dairy well, while others suffer from extreme “intolerance”. If dairy causes you bloating, gas, and/or GI distress, you are better off eliminating it from your meal plans or keeping it to a minimum.

If you are intolerant to pasteurized dairy, you may actually do better drinking and eating un-pasteurized dairy. Pasteurization and homogenization use high heat temperatures that kill off all of the naturally occurring digestive enzymes found in raw milk and your body can have a difficult time digesting it. This is why some people who have a hard time digesting pasteurized dairy actually feel great drinking raw (un-pasteurized) milk, because all the naturally occurring digestive so that it is free of growth hormones and antibiotics.



Food sources:

Protein Sources

- Grass Fed Beef, Bison, Lamb, Pork (lean), Venison
- Free Range (preferably organic) Chicken, Turkey, Duck, Cornish Hen, Quail (this includes white and dark meat)
- Whole Organic Eggs
- Wild Fish (all varieties, except for Tuna which should be consumed 1 time per week maximum)
- Cottage Cheese (preferably raw and organic)
- Raw Nuts (not including peanuts or cashews) **Nuts will also be included under healthy fat sources.
- Raw Nut Butters (except for Peanut Butter and Cashew butter)

Fat Sources

- Organic, extra virgin olive oil
- Fish Oil (liquid or capsules)
- Cod Liver Oil (liquid or capsules)
- Flax seed Oil
- Organic, Raw Butter
- Avocado
- Organic, Extra Virgin Coconut Oil
- Raw Nuts (not including peanuts or cashews) **Nuts are also included under healthy protein sources.

Fibrous Carbohydrate Sources

- All vegetables
- All fruits (in their natural state -> no fruit juices or dried fruits)

Complex Carbohydrate Sources

- Brown or Wild Rice
- Barley
- Millet
- Quinoa
- Oatmeal
- Rye
- Spelt
- White or Sweet potatoes
- Beans (all varieties)



Here are some helpful tips and instructions:

Sources of Clean Water

- Best bottled water sources: Evian, Volvic, Fiji, and Trinity
- High Quality Water Filters for your sink:

<http://www.sws-aquasana.com>

How to spot sugar

The following words all mean “added sugar”

Hint: the words “syrup”, “sweetener”, and anything ending in “ose” can usually be assumed to be “sugar”. If the label says “no added sugars”, it should not contain any of the following:

- Corn Sweetener
- Corn syrup, or corn syrup solids
- Dehydrated Cane Juice
- Dextrin
- Dextrose
- Fructose
- Fruit Juice Concentrate
- Glucose
- High Fructose Corn Syrup
- Honey
- Invert Sugar
- Lactose
- Maltodextrin
- Malt syrup
- Maltose
- Maple syrup
- Molasses
- Raw sugar
- Rice Syrup
- Saccharose
- Sorghum or sorghum syrup
- Sucrose
- Syrup
- Treacle
- Turbinado Sugar
- Xylose

Remember, your body doesn't care what the label says. It's all just "sugar"!



How to spot artificial sweeteners

Sucralose (Splenda)
Saccharin (Sweet n Low)
Aspartame (Equal)

Eliminate these wheat products

- Bread
- Cereal
- Crackers
- Pasta
- Baked Goods
- And anything that contains “wheat” (even whole wheat) in the ingredients list

Dairy products

- Raw Milk and Raw Cheese may need to be purchased at specialty shops or online. Visit RealMilk.com or OrganicPastures.com for more information.
- Raw Cheese (in many varieties) can be found at Whole Foods, Health Food Stores and many local supermarkets in the U.S..
- Make sure pasteurized and homogenized Milk and Cheese are Organic

High Quality Omega 3 supplements

The following brands prove to be the most high quality Omega 3 supplements:

- Carlson’s Fish Oils- Whole Foods, Vitamin Cottage
- Nordic Naturals- same



Meal Plans

The following meal plans is what we recommend as what everyday should look like with variance. The serving sizes are the minimum you should be eating. Because each person's starting point is very different and your training demand will also be different, the meal plan servings can be adjusted based on your needs.

If you experience hunger at any time, increase the protein, fruit or vegetable serving in 1 or 2 meals by 1 serving. For example, if lunch calls for 3 ounces of turkey, increase it to 4 ounces or even 5 ounces if necessary. Please do not be afraid to add more healthy food to your plan to nourish your body sufficiently. Eating one or two more ounces of a healthy protein, fruit or vegetable will not affect your results.

Breakfast (7-8am)

Protein Choices: Choose One

2-3 whole organic eggs

3 slices nitrate/nitrite free turkey, beef or pork bacon

2 nitrate/nitrite free turkey or chicken breakfast sausages

(description of Recommended Brands below)

2-3 oz leftover meat (beef, poultry, pork, fish) from the night before

3 Tbs Hummus (V – a vegetarian option)

½ cup cottage cheese (V) *

2 Tbsp Natural Raw Nut butter (V) ex. Almond butter or peanut butter

Vegetable Choices: Choose One

1-cup cooked broccoli

1-cup cooked cauliflower

1-cup sautéed spinach

1-cup steamed asparagus

Fruit Choices: Choose One

1 green apple

1 pear

½ medium banana

½ cup strawberries or blueberries (or combination of both)

Examples:

1 egg + 3 whites

1-cup steamed cauliflower

1 green apple

3 slices turkey bacon

1-cup spinach

½ medium banana



3 Tbsp Hummus
1 cup steamed cauliflower
½ cup strawberries

2 oz leftover salmon
1 cup cooked broccoli
1 pear

Snack #1 (10-11am) and Snack #2 (3-4pm)

Protein Choices: Choose One

2 TBSP Natural, Raw Almond Butter (V)
1 oz Raw Almonds (V)
1 oz Raw Walnuts (V)
1 oz Raw Pumpkin Seeds (V)
1 oz Raw Sunflower Seeds (V)
2 hard-boiled eggs
2 oz sliced turkey breast or chicken breast

Vegetable Choices: Choose One

Celery Sticks
6-7 Baby Carrots
½ sliced red, yellow, or green pepper
1-cup broccoli or cauliflower

Fruit Choices: Choose One

1 green apple
1-cup strawberries
1-cup blueberries

Examples:

2 Tbsp Almond Butter
Celery Sticks and 1 small green apple

2 hard-boiled eggs
½ yellow pepper
1-cup blueberries

1-ounce raw walnuts
6 baby carrots
1-cup strawberries



Lunch (1-2pm) and Dinner (6-7pm)

Protein Choices: Choose One

3-5 ounces chicken (dark or white meat)

3-5 ounces turkey (dark or white meat)

3-5 ounces fish (tuna only 1 time per week)

2-4 ounces beef (lean varieties)

1 cup cooked beans (any variety) or lentils (V)

½ cup cottage cheese (V) *

Over a salad that is made up of any of the following:

All lettuce except for Iceberg (It has no nutritional value), Celery, Peppers, Cucumbers, Tomatoes

Vegetable Choices: Choose One

1 cup cooked broccoli

1 cup cooked cauliflower

1 cup sautéed spinach

1 cup steamed asparagus

Dressing: Raw Apple Cider Vinegar

2 tsps Extra Virgin Olive Oil

Spices (salt, pepper, Italian Seasonings, to taste)

Examples:

4 oz grilled chicken (white or dark)

Over a large salad made up of Romaine lettuce, tomatoes, cucumbers and celery

1 cup asparagus added to the salad or on the side

Apple Cider Vinegar and 2 tsp olive oil as dressing

½ cup chickpeas + ½ cup kidney beans

Over a large salad made up of Romaine lettuce, tomatoes, cucumbers and celery

1 cup cooked broccoli added to the salad or on the side

Apple Cider Vinegar and 2 tsp olive oil as dressing

4 oz salmon

Over sautéed spinach

Salad on the side with apple cider vinegar and 2 tsp extra virgin olive oil



Notes:

Turkey, Beef, Pork Bacon - Look for a brand that has 5-7 g of protein per slice and contains NO nitrites and nitrates. Also look for “no hormones or antibiotics” used on the animal.

Turkey or Chicken Breakfast Sausage – Look for a brand that has 5-7 g of protein per link and contains NO nitrites and nitrates. Also look for “no hormones or antibiotics” used on the animal.

Eggs must be organic! I would love for all of the food you eat be organic but if nothing else, eggs are a must!

All almonds, walnuts, pumpkin seeds, sunflower seeds and almond butter must be raw. They cannot be roasted. Roasting nuts takes a good food and turns it into a bad food! Olive Oil must be extra Virgin and preferably organic.

*If you have chosen to take the 2 week “no wheat, no dairy” challenge, cottage cheese should be eliminated from your protein choices.

Typical Day Meals and Times:

7am – Breakfast

10am – Snack #1

1pm – Lunch

3pm – Snack #2

6pm – Dinner

If your schedule does not permit for eating at these times, you can structure your day however it works best for you. Just be sure to fit in a minimum of 4 of your meals and space each meal no more than 4 hours apart, 3 hours being the ideal.



Miscellaneous important information:

Water Intake – $\frac{1}{2}$ of your bodyweight in ounces of water.

Example: If you weigh 150lbs, you would have to drink 75 ounces of water.

Salt – One big change for this week is that you are going to buy *Celtic Sea Salt*. You can either buy it at Whole Foods or order it online at CelticSeas.com.

We encourage you to replace any salt in your home (Kosher, Iodized, or any other form of sea salt) with this brand. I assure you that salt is not bad. It is just the type of salt that is either good or bad. Do not worry if you cannot get this salt right away. We just want this to be one of those changes that you incorporate for life!

Omega 3 Oils-

The benefits of Omega 3's are endless. Not only do they assist in weight loss, but they alleviate joint pains, improve digestion and elimination, and keep the arteries of the heart nice and clean.

- Carlson's Fish Oil at any of our markets is good.

You are going to begin by taking one soft gel with dinner. We will gradually increase as the weeks go on. If there was only one supplement that I could have all of my clients on, it would be a high quality Omega 3 supplement. It really does wonders for the body.



Shopping List

The following are a few food-shopping basics to help you get started on your plan.

Bread

The best bread to use is sprouted whole grain bread. If you do not have access to sprouted grain bread, you can also choose rice bread or spelt bread. Here are a few brands that I have found to be good choices. Sources include health food stores (often in the freezer section) and the following stores in the U.S.:

- Food for Life brand's Ezekiel 4:9 organic sprouted whole grain products (<http://www.foodforlife.com>)
- Vitamin Cottage
- Trader Joe's
- Whole Foods Market

Dairy

Choose raw organic dairy products. The following Web sites provide information about obtaining raw organic dairy products in the United States:

- A Campaign for Real Milk (<http://www.realmilk.com>)
- Organic Pastures (<http://www.organicpastures.com>)
- The Weston A. Price Foundation (<http://www.westonaprice.org>)

Meats, Poultry and Fish

All of the animal protein you choose should be hormone- and antibiotic-free, organic, and preferably grass-fed. Sources include local health food stores, many supermarkets and the following in the U.S.:

- U.S. Wellness Meats (<http://www.grasslandmeats.com>)
- Vital Choice (<http://www.vitalchoice.com>)

Nut Butter

Choose nut butters (e.g., almond, walnut, cashew, or macadamia nut) made from raw (not roasted) organic nuts. Sources include local health food stores and the following in the U.S.:

- Nut Butters (<http://vivapura.com>)
- Nut Butters <http://vivapura.com>

Oil

For high-heat cooking, **coconut oil** is your best choice. It should be certified organic, unrefined, no chemicals (including hexane) added, unbleached, not deodorized, not hydrogenated, made from traditional coconut palms only (no GMO varieties), and cold-pressed (no heat used in the extraction process). Sources include local health food stores and the following:

- Extra Virgin Coconut Oil (<http://www.nutiva.net>)
- Extra Virgin Coconut Oil (<http://www.vivapurashop.com>)



For medium-heat cooking (sautéing) and use straight from the bottle (on salads and cooked foods), choose organic extra-virgin **olive oil**. It should be cold-pressed, cloudy (unrefined), and sold in a dark bottle. Sources include local health food stores and the following in the U.S.:

- Organic EVOO. (<http://evoo.vitalchoiceorganics.com>)
- Bragg EVOO (www.truefoodsmkt.com)
- Whole Foods Market

Omega-3 Supplements:

Cod liver oil should be taken in the winter because of its higher vitamin D content. (Although our bodies synthesize vitamin D from the sun's ultraviolet rays, sun exposure typically is insufficient during the winter.) The soft gel is more stable than the liquid, which goes rancid quickly and should be kept in the refrigerator. Take according to instructions on the bottle.

Fish oil should be taken in the summer because of its lower vitamin D content. The soft gel is more stable than the liquid, which goes rancid quickly and should be kept in the refrigerator. Take according to instructions on the bottle, or 1 milliliter for every 10 pounds of body weight (1 teaspoon = 5 milliliters).

Krill Oil has been found to have much better absorption in the body than many fish oils. It is extremely high in Omega 3 fats and in antioxidants. The following brands, available at local health stores and online, are tested by independent laboratories for the absence of heavy metals:

- Krill Oil
- Sockeye Salmon soft gels (<http://www.vitalchoiceorganics.com>)

Salt

Choose pure unrefined sea salt with no additives, preferably Celtic sea salt. Sources include local health food stores and the following in the U.S.:

- Celtic Sea Salt brand (<http://www.celticseasalt.com>)
- Redmond's Real Salt



Stevia

Many stevia formulations are available (e.g., liquid, powder, powder plus insulin fiber). The liquid extract is ideal for all beverages, and the powders are ideal for baking. Powders are suitable for use in hot liquid but may not dissolve in cold liquids. Read packages to determine which product is right for you and the correct amounts to use in recipes. Sources include local health food stores and the following in the U.S.:

- Steviva (<http://www.steivasweetener.com>)
- Whole Foods Market (in the supplement section)

Water Filtration Systems

Our bodies absorb water not only from food and drink but also through the skin, the body's largest organ. You should filter water for bathing as well as for drinking and cooking (i.e., at the kitchen sink). A whole-house filtration system takes care of this and more; it is installed where the main water line enters the home and filters the water before it flows throughout your plumbing system.

A good online resource is the following:

- Sun Water Systems ([Aguasana](#)) sells Aquasana brand products for kitchen, bathroom, and whole-house water filtration as well as glass bottles for water storage – best news here is that we talked with Sun Water Systems and they are willing to give Enduro MTB Training customers a **10% discount** using the link above.