



# Partners in Prevention

Taking Health & Safety to Higher Ground

August 2017

## YOUR GAMEPLAN TO LIVE

### Manuka Honey 101

#### What is Manuka Honey?

Manuka honey is produced by bees that tended to flowers of the Manuka plant, also called the tea tree, which grows in New Zealand. The honey's source is a key difference in what sets it apart from the rest of the honey world. It doesn't contain blends of other honey types, making the compounds in it rather consistent.

Meanwhile, both raw and regular honey is made by bees that source nectar from any type of plant. Aside from antioxidants, high-quality Manuka honey contains amino acids, B vitamins and minerals like calcium, copper, iron, potassium, sodium and zinc.

Although it's a bit pricey, which can throw people off, various studies over the years prove that Manuka honey is quite beneficial for you, and it may be worth the cost. Not to mention, when using it you do not need a large serving. Although it definitely is worth doing your research into the brand you would like to purchase because you want to make sure you're getting the good stuff if you're going to spend the money.

#### What Kind Should I Buy?

Like most things these days, not all Manuka honey is created equal. You want raw, unpasteurized, unfiltered (or *very minimally* filtered), unaltered Manuka honey; the less processing the better. The higher the pollen count the better.

The trust worthiest rating scale right now in the Manuka honey game is the UMF (Unique Manuka Factor) rating system. There are a few other rating systems, but at this stage UMF is more established and widely used. It stands for "Unique Manuka Factor." The minimum UMF rating recognized is UMF5, however, it is not considered beneficial unless it carries a UMF 10+ level of antibacterial activity in the honey. Anything ranging from UMF10-UMF15 is a useful level, and anything UMF16 or higher is considered a superior quality.

**Genuine Manuka honey will have its rating right on the bottle. Genuine UMF Manuka honey must comply with all six of the following criteria:**

1. It has the quality trademark UMF clearly stated on the front label.
2. It is packaged and labeled in New Zealand.



### Avocado and Kale Smoothie Bowl

Serves 1

#### Ingredients:

- 1 cup kale leaves
- 1 cup almond milk
- 1 banana, sliced
- 1/2 avocado
- 1/2 cup ice
- 1 Tbsp. agave syrup, plus additional for serving
- 1/2 cup raspberries
- 1 kiwi, sliced
- 1 tsp chia seeds

#### Directions:

Blend the kale, almond milk, 1/2 of the banana, avocado, ice, and 1 tablespoon of the agave until smooth. Transfer to a bowl and top with the raspberries, kiwi, chia seeds, remaining 1/2 banana, and a drizzle of agave.

Source: <https://www.buzzfeed.com/lindsayhunt/smoothiebowl>s

(Continued on page 2)

(Your Gameplan to Live, continued from page 1)

3. It is from a New Zealand company licensed to use the quality trademark UMF.
4. It has the UMF Licensee's brand name and license number on the label.
5. It has a rating number alongside the trademark UMF. A number on its own or without the trademark UMF does not identify genuine UMF Manuka honey.
6. It is endorsed by the Official UMF Test Certificate that states the tests results for the batch number displayed on the label.

Compared to other types of honey, Manuka honey has been shown to be more potent and health-boosting because of its higher methylglyoxal (MG) concentration. This potent compound can help the body fight infections and boost the body's overall health and immunity. The MG compound is also found in other types of honey, but in much smaller amounts.

### **BENEFITS:**

- Boosts immune system
- Promotes overall health & wellness
- Helps soothe sore throat
- Protects your body against the common cold and helps relieve symptoms of the common cold
- Assists in relieving sinus infections
- The antioxidant content can provide protection against tissue damage by neutralizing free radicals
- Can improve oral health by reducing oral pathogens found in plaque
- It can also work wonders for the digestive system, as it can relieve bloating, mild digestive upsets, indigestion or gastric reflux, heartburn and may even help heal stomach ulcers and irritable bowel syndrome. It serves as a remedy for nausea.
- Lessens allergic reactions
- It is great for your skin to reduce inflammation and lock in moisture. It has the potential to help heal eczema.

**Important Note:** Manuka honey should not be given to babies under 12 months old. Honey is a known source of bacteria spores that can cause botulism, a rare and serious disease triggered by toxins from the Clostridium botulinum bacteria strain.

### Sources:

<http://www.manukahoney.com/what-is-umf->  
<https://draxe.com/manuka-honey-benefits-uses/>

## Macronutrients

By Eric Price, ATC, Occupational Athletic Trainer

By definition a macronutrient is, "a substance required in relatively large amounts by living organisms." The three macronutrients are carbohydrates, proteins, and fats. These three macronutrients cannot be produced by the body and are needed from foods for energy.

In this article I would like to focus on energy and how counting calories is not enough to notice lifestyle improvements. Another word that you should know the definition



## Garlic Parmesan Salmon

Serves 6

### Ingredients:

- 1 2-3 lb. salmon fillet
- 1 tbsp. extra-virgin olive oil
- 2 tbsp. freshly chopped parsley
- 1/4 c. finely grated Parmesan
- 4 cloves garlic, minced
- Kosher salt
- Freshly ground black pepper

### Directions:

Preheat oven to 400° and spray a piece of aluminum foil with cooking spray. In a small bowl, mix together oil, parsley, Parmesan, and garlic and season with salt and pepper. Place salmon on foil on a large rimmed baking sheet and brush garlic mixture all over salmon. Cover with foil and bake until salmon is cooked through, 15 to 20 minutes. Sprinkle with more Parmesan and serve.

Source: <http://www.delish.com/cooking/recipe-ideas/recipes/a50778/garlic-parmesan-salmon-recipe/>

(Your Gameplan to Live, continued from page 2)

of is a calorie. A calorie is a unit to measure the amount of energy needed to raise the temperature of one gram of water through 1°C – a calorie is often used to measure the energy values of foods. Again, the key word is *energy!* Now, let us take a look at each of the macronutrients.

## 1. Carbohydrates

Carbohydrates are considered the “master fuel” of the body. They are adequate before, during, and after strenuous work and exercise. Carbs are classified into two categories: *simple and complex*. Simple carbs are noted as sugars and complex are more of your multi and whole grain products. Complex carbs take longer to breakdown, thus increasing metabolism and sustaining energy storages for strenuous activities.

Let’s look at some numbers and examples of the best carbs. A carb has 4 calories of energy per gram. If you are looking at a nutrition label and it states the product has 10 grams of carbs, this means that product is 40 calories of energy from carbohydrates. The recommended range of calories coming from carbohydrates per day is between 45-65%. Research has also indicated that individuals could consume 5-10g of carbs per kilogram of body weight. These numbers can vary outside of these recommendations depending on *calories burned per day*.

The best examples of carbohydrates are fruits and vegetables. My personal favorite carbohydrates are whole-wheat bread, brown rice, whole-wheat oatmeal, and quinoa.

## 2. Proteins

Proteins are barely used as an energy source unless the body is in a starvation state or in energy demand. They are constantly catabolized to rebuild and reshape muscle breakdown (amino acids are the building blocks of proteins). These guys are needed for recovery, but not to the extent the American media portrays. Just like with carbs, the amount of protein needed per day can vary depending on goals and how strenuous an individual is throughout the day.

So let’s look at the numbers. A protein has 4 calories of energy per gram, but remember our bodies barely “burn” proteins. The most reliable way to determine adequate protein intake is to consume 0.8g per kilogram of body weight. For daily caloric intake, the research has indicated between 10-35% of total calories for the day should come from protein. The best foods for protein are seeds, nuts, beans, lean meats (salmon, turkey, chicken), beef, and eggs.

## 3. Fats

I have saved the best for last and probably the most confusing macronutrient—FATS. You should NOT be afraid to consume fats. They are our most efficient source of energy and are needed during long bouts of exercise. They also help us stay insulated in the cold weather months, protect organs and absorb essential vitamins and minerals. The different types of fats are triglycerides, phospholipids, and sterols. The



## Pasta with No-Cook Tomato Sauce

Serves 4

### Ingredients:

- 1 1/4 pounds ripe tomatoes, cut into bite-size pieces
- 4 anchovy fillets, finely chopped (if you don’t like anchovies, try capers instead)
- 1 clove garlic, chopped
- 1/2 cup pitted Kalamata olives, chopped
- 1/3 cup olive oil
- 1/2 teaspoon crushed red pepper
- Kosher salt
- 3/4 pound spaghetti (try whole grain spaghetti, protein spaghetti, black bean spaghetti or even zucchini noodles to make it even healthier)
- Torn fresh basil and grated Parmesan, for serving

### Directions:

Combine the tomatoes, anchovies, garlic, olives, red pepper and 1/2 teaspoon salt in a large bowl. Let sit, until flavors meld, at least 10 and up to 30 minutes. Cook the spaghetti according to the package directions; drain. Add to the bowl with the sauce and toss to combine.

Source: <https://www.realsimple.com/food-recipes/browse-all-recipes/pasta-no-cook-tomato-sauce>



(Your Gameplan to Live, continued from page 3)

building blocks of fats are fatty acids. Fatty acids are carbon atoms linked together like a chain. These chains are where we observe saturated or unsaturated levels. Research has indicated that reducing saturated and trans fat intake and substituting them with mono and poly unsaturated fat intake could reduce the risk for cardiovascular disease. Also be sure to monitor your cholesterol intake as well.

Things are a little different when we look at the numbers for fats. Fats contain 9 calories of energy per gram. **Newsflash—fats have the most abundance of energy.** Our bodies want to utilize fats.

Once you set your percentages for carbs and proteins, only fats will remain. Therefore, if I set my carbs to be 55% and proteins at 25%, that leaves fats at 20%. The American Heart Association recommends 30% or less of your caloric daily intake should contain fats (the good ones...mono and poly unsaturated). Foods high in good fats are nuts and seeds, salmon, and avocado.

I hope this information provides a little more understanding than just counting calories alone. Contact your regional Occupational Athletic Trainer or a registered dietitian if you would like to make a nutritional change in your lifestyle. These healthcare professionals will work with you to set goals and a food map to achieve your goals. Just remember exercise alone is not the answer. You need to fuel your body right!

## NEWSLETTER SUBSCRIBER FEEDBACK

As you can see, we focused on nutrition this month for our newsletter. Usually, we do a good mix of nutrition, exercise, safety, lifestyle, wellness, general health, and motivation.

We'd love to hear what our readers would like to see in our upcoming newsletters or what your favorite topics have been over the years – after all, we do write it for YOU!

Please email [generalinfo@occupationalathletics.com](mailto:generalinfo@occupationalathletics.com) or [info@gameplanforliving.com](mailto:info@gameplanforliving.com) with any requests or comments!

**At Occupational Athletics, we know that the future of healthcare is in the *prevention* of illness and injuries.**

**It is our mission to provide preventative care utilizing sports medicine principles and lifestyle modification training to create an atmosphere of health, safety, and performance to allow employees to enjoy an enhanced quality of life and reach their retirement—and beyond—SUCCESSFULLY!**



## What's Causing Your Neck Pain?

### Some of the most common causes of neck pain:

- *Poor posture and muscle strains.* When you slouch and collapse your shoulders forward, it creates unwanted stress. Muscle strains can result from overuse such as tilting your head and chin in an undesirable position for too long.
- *Worn joints.* Just like all the other joints in your body, your neck joints tend to undergo wear and tear with age.
- *Nerve compression.* Herniated disks or bone spurs in the vertebrae of your neck can press on the nerves branching out from the spinal cord.

### Prevention Tips:

- Practice gentle neck exercises and stretching. Exercises may improve pain by restoring muscle function, optimizing posture, and increasing the strength and endurance of your neck muscles.
- Use proper body mechanics when lifting objects; keep your neck in line with your body.
- If you have a natural habit of sticking your neck and chin either up or down, you are straining your neck constantly. Be aware. Keep your neck and chin in line with your body. Don't slouch your shoulders forward.
- Sleeping on your side or back is ideal; sleeping on your stomach strains your neck. In addition, avoid using too high or too stiff a pillow, which keeps the neck flexed overnight.
- A horseshoe-shaped pillow can support your neck and prevent your head from dropping to one side while traveling or relaxing.



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