

WELLNESS JOURNEY: HEALTHY PROTEINS AND FATS

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CONTINUING OUR WELLNESS JOURNEY

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We are continuing our annual wellness journey to learn about healthy ways to make positive change. Another topic which we are asked about regularly is a little ‘back to basics’, though so relevant...

‘How do I determine which fats and proteins (and how much) are best for my health?’

We will get into some definitions, benefits of giving your body what it needs, and the downfall if we go off the rails.

Today we will set goals for positive change and learn from Chef Olive how to make a healthy Salmon Papillote we can make in advance!

OBJECTIVES FOR TODAY

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- What is the role of proteins and fats?
- Which proteins and fats are most beneficial?
- How can damaged fats affect my health?
- How to offset the impact of damaged fats?
- How to determine what's right for my body?

2022 includes wellness talks, demos, cooking classes and individual consultations for a better you!

Fats and Proteins are two of the three macronutrients in our body. It's essential we take in what we need. Let's learn more toward our goal of wellness, disease prevention, and ultimately how to make positive lifelong changes utilizing fun, bite-sized, interactive sessions.

Let's chat
1:1 in
September

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BEFORE WE DIVE INTO THE DETAILS...

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What are our Sources of Energy?

- Macronutrients provide energy (calories)
 - Proteins
 - Fats
 - Carbohydrates
- Support Team - hydration and micronutrients
 - Water
 - Vitamins
 - Minerals
 - Phytonutrients (colors in nature)

Today we will focus ...

- ✓ Proteins
- ✓ Fats

Carbs are a whole talk to themselves! We can cover this one in the future!

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What is the difference between protein sources?
How are protein and fat sources related?

PROTEINS – LET'S START WITH THE BASICS

What is a Protein?

- 1 of the 3 macronutrients
- Cells build proteins by linking amino acids (AAs) together in various combinations, your body can't utilize it unless these strings are complete

Groups (primary sources) / Quality

- **Meats:** organic, wild, grass fed, low allergen
- **Dairy:** organic, raw, whole, cultured
- **Legumes/Grains:** organic, soaked & dried, fermented

Things to think about...

- ✓ Correlate your energy levels and mood with amount and timing of protein consumption
- ✓ Identify a variety of protein sources in your diet

FUNCTIONS OF PROTEIN

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- Building materials: growth, repair, & maintenance
- Body tissues: muscles, blood, hormones, enzymes...
- Immune system function
- Energy production
- Metabolic & digestive enzymes
- Maintain volume & composition of body fluids
- Transport nutrients



Satiety / Mood stability / Energy level

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SYMPTOMS OF PROTEIN IMBALANCE

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Deficiency:

- Loss of muscle tone
- Slow wound healing
- Irritability
- Food cravings
- Low libido
- Fatigue, muscle weakness
- Thin hair, weak nails

Excess:

- Acidosis and dehydration
- Constipation
- Putrefaction in the gut if stomach acid is low
- Musculoskeletal issues
- Kidney dysfunction
- Ammonia/nitrogen in the blood

Most people fall into one category or the other, few are on target

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COMPLETE & INCOMPLETE PROTEINS

- Animal-sourced proteins
 - More bioavailable - generally easier to absorb
 - Contain the combination of AAs to create proteins
 - Require less calorie intake to achieve needed protein levels
 - Need to be aware of the quality of fats along with the protein
- Plant-based proteins
 - Building blocks are generally not in the right combination of AAs; only those that create proteins will be absorbed

Complete



Combine with
more foods
to complete



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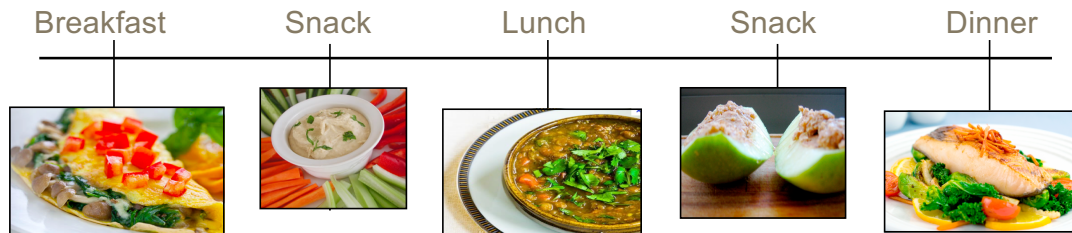
SAMPLE DAY (VOLUME AND TIMING WILL VARY)

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Needs vary based on age, gender, activity, health conditions, medications, health goals (building, weight management), popular diet plans, short or long-term needs, doctor recommendations, etc.

- Based on your needs determine the size of your meals and snacks

Example: Meal = ~ 14-20 grams of protein per meal
Snack = ~ half of a meal



- Average serving of protein: Animal 3oz., Vegetable 6oz.

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- Which fats are most beneficial?
- How do low quality or damaged fats affect your health?
- How to offset the impact of damaged fats?

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FATS

What is a Fat?

- 1 of the 3 macronutrients
- Types: mono, poly & saturated
- Whole foods:
 - Seeds: flax, chia
 - Nuts: almonds, walnuts
 - Other: coconut, olives, avocado
- Oils/Fats:
 - Plant: Flax, hemp, olive, avocado
 - Dairy: Butter, Ghee
 - Animal product: Lard



Things to think about...

- ✓ Identify high quality, healthful fats
- ✓ Identify the harmful fats in your diet and suggest healthful alternatives

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FUNCTION OF FATS

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- Concentrated source of energy
- Absorption & transportation of fat-soluble vitamins
- Essential parts of all cell membranes
- “Padding” - protection for internal organs
- Needed for healthy nerve function
- Important precursors for hormones
- Brain is 60% fat
- Provides feeling of satiety
- Carry flavor



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TYPES OF FATS - QUALITY COUNTS

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- Saturated: butter/dairy, animal fats, coconut oil
 - Butter - vitamins A and D, great for cooking, butyric acid good for intestinal flora balance
 - Grass fed beef/ meats - CLA (Conjugated Linoleic Acid) - known to improve metabolism
 - Coconut oil - antibacterial, antiviral, antifungal
- Monounsaturated: olive oil, almond, avocado, peanuts, most other nuts (except walnuts)
 - Lower inflammation, healthy cholesterol levels, heart healthy
- Polyunsaturated: wild salmon (Omega-3) & sunflower seeds (Omega-6)
 - Healthy inflammatory response, brain function, mood, healthy cholesterol levels (*the problem is we have too much Omega-6s*)

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ESSENTIAL FATTY ACIDS (EFAs)

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Omega-3

- Flax, hemp, pumpkin seeds, cold water fish, pastured beef, chicken, dairy, algae, walnuts
 - Reduce inflammation
 - Speed metabolism
 - Lowers cholesterol & triglycerides; keeps blood thinner & healthier
 - Necessary for brain development & function

Omega-6

- Safflower, sunflower, corn, soy, most nuts
 - In processed & fast foods, grain-fed beef, dairy, chicken, farmed fish
 - Contributes to inflammatory process—necessary but in moderation, must be balanced with Omega 3s
 - 3:1 ratio (omega 6:3)

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PROBLEMS WITH UNSATURATED OILS

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- Oxidative rancidity (known as autoxidation)
 - Can damage tissues, cells, & DNA
 - Caused by heat and/or light
 - Can happen in your frying pan
- Hydrogenation (aka trans fats)
 - Substance is treated with molecular hydrogen
 - Toxic, harmful to health. Found in processed foods (baked goods, Crisco, margarine, etc.)
 - Does not happen in frying pan

This happens with unsaturated fats since they are chemically unstable (lacking hydrogens in they structure)

Oxidized fats can trigger Chronic Inflammation over time, and can be a trigger for an autoimmune disorder, that in turn can become cancer

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COOKING FATS BY TEMPERATURE

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- Damage can happen based on the quality of the product, during processing, storage and when it hits your frying pan.
- Buy organic, when possible, to avoid contamination of the fats, especially animal products
- Fats, organized by heat sensitivity, in the table below.

Higher heat cooking	Med temp fats (sauté, bake – up to 375F)	Low temp fats (finishing oil – up to 250F)
<ul style="list-style-type: none"> • Avocado oil • Coconut oil (refined) • Rice Bran oil • Clarified Butter / Ghee • Refined Sesame oil • Sunflower oil 	<ul style="list-style-type: none"> • Organic Butter • Coconut oil (virgin) • Olive oil • Organic Lard / Animal Fat 	<ul style="list-style-type: none"> • Olive oil (extra virgin) • Unrefined nut oils • Walnut oil • Do not heat <ul style="list-style-type: none"> • Flax seed oil • Hemp seed oil

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READ INGREDIENT LABELS!

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Ingredients: ENRICHED FLOUR (WHEAT FLOUR, NIACIN, REDUCED IRON, THIAMINE MONONITRATE [VITAMIN B1], RIBOFLAVIN [VITAMIN B2], FOLIC ACID), SOYBEAN OIL, SUGAR, PARTIALLY HYDROGENATED COTTONSEED OIL, SALT, LEAVENING (BAKING SODA AND/OR CALCIUM PHOSPHATE), HIGH FRUCTOSE CORN SYRUP, SOY LECITHIN (EMULSIFIER), NATURAL FLAVOR, CORNSTARCH.

Size: 16 OZ
Upc: 4400000028

Nutrition Facts

Serving Size 16g
Servings per Container about 28

Amount Per Serving	
Calories 80	Calories from Fat 40
% Daily Value*	
Total Fat 4.5g	7 %
Saturated Fat 1g	5 %
Trans Fat 0g	0 %
Cholesterol 0mg	0 %
Sodium 135mg	6 %
Total Carbohydrate 10g	3 %
Dietary Fiber 0g	0 %
Sugars 1g	
Protein 1g	
Vitamin A 0 %	Vitamin C 0 %
Calcium 2 %	Iron 2 %

*Percent Daily Values are based on a 2,000 calorie diet. Your daily values may be higher or lower depending on your calorie needs:

	2,000	2,500
Total Fat	Less than 65g	80g
Sat Fat	Less than 20g	25g
Cholest	Less than 300mg	300mg
Sodium	Less than 2,400mg	2,400mg
Total Carb	300g	375g
Fiber	25g	30g

Legally manufacturers can say Zero grams if product contains < 0.5 g per serving. Serving size set by manufacturer & is often very small (16g = 1/2 oz. or 5 Ritz crackers).

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KEY TAKEAWAYS ABOUT FATS

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Which fats are most beneficial?

- Organic sources of saturated and monounsaturated fats
- Also increasing Omega-3s, decreasing Omega-6s

How do we care for the fats/oils?

- Keep them stored in a cool, dark place
- Treat them well on the pan (do not over cook)
- If oils smoke in the pan – toss it

Refer to the Oil Reference Chart by temperature

How to offset the impact of damaged fats?

- Eat more organic, undamaged sources of saturated or monounsaturated fats (continue to replace the fats in your cells)
- Eat plenty of fruits and vegetables to get in more antioxidants
- Increasing Omega-3s (anti-inflammatory); decreasing Omega-6s

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WHAT STEPS WILL YOU TAKE TODAY?

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Start thinking about your goals today!

- Two goals for reducing long-term lifestyle risk factors based on what you learned about proteins and fats

Create SMART goals!

We will continue to provide support and education:

- Nutrition and Lifestyle Discussions + Demos for Disease Prevention
- Return of the Summer Cooking Series!
 - Quick and healthy demos!
 - Including meal prep, recipes and nutrition tips as well!
- Individual Nutrition Consultations
 - A limited number of sessions available to address your nutrition questions – June sessions are complete
 - Next up: Sept 27 & 28

What is your first goal?

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WRAP UP / QUESTIONS?

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About Lisa Michelle Miller, BS, NC

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- Kitchen on Fire Cooking School

- For the Home Chef in Berkeley & Oakland since 2005
- Owned by Chef Olivier Said (founder) & Lisa Miller
- Hands-on Cooking Classes, Events: In-Person and Virtual
- Nutrition Education, Corporate Wellness, Individual Consulting, Wellness Probiotics, Tonics & Teas - @drinkRebout

Link to today's presentation, demo info and more
<http://www.kitchenonfire.com/lifestyle-for-disease-prevention>

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APPENDIX

- There are more areas to cover about fats, too much for today
 - Trans Fats
 - Cholesterol
- A couple slides are provide fore an overview

DETRIMENT OF TRANS FATS

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BABIES/CHILDREN

- ❑ Low birth weight infants
- ❑ Low volume and quality of breast milk
- ❑ Reduced visual acuity in infants
- ❑ Greater risk of childhood asthma



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AGING, ADULT ONSET CONDITIONS

- ❑ Abnormal sperm production, decreased testosterone production, & increased risk of prostate disease
- ❑ Increased rate of heart disease
- ❑ Lower HDL; elevate LDL
- ❑ Increased rate of cancer and diabetes
- ❑ Increased incidence of obesity
- ❑ EFA deficiencies due to enzyme interference

CHOLESTEROL

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- Essential to life; critical component of all cells
- Precursor to hormones; i.e., adrenal steroids, testosterone, estrogen
- Plentiful in brain & spinal cord
- Body will synthesize cholesterol even if none is eaten
- Causes of excess cholesterol:
 - Low fiber diet
 - High fructose corn syrup; refined carbohydrates; alcohol
 - Genetics
 - Unchecked inflammation (allergies, etc.)
 - Liver damage / fatty liver
 - Nutrient deficiencies preventing cellular repair & maintenance
- Is it a harmful substance? No. CAN there be a correlation? Yes, but low
 - Oxidation is problematic and contributes to inflammation

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