

*Live the Anti-Inflammatory Lifestyle.™*

**FUNDAMENTALS**



LIVE  
Ottawa Spring 2017

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there is no better  
time than now  
to start living  
healthy.

Source: Relatably.com

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**Welcome To Class 3**



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## Review Week 2

- Gluten
  - Gluten Free not always equal to Healthy
  - Gluten damages the intestinal lining and triggers an immune response
  - Goodbye to Gluten
- Cultured/Fermented Foods
- Stress vs. Relaxation Response
  - Become aware and how to switch to Para-Sympathetic response




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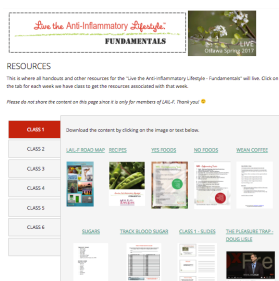
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## Resources




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## Dairy – Comfort Food For A Reason

- Dairy in most “Comfort Foods”
  - Food Opiates in dairy and wheat
- Casein vs. Lactose
  - Protein vs. Sugar
- Highly Allergenic
- Thicker Mucus




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## Milk Sugar - Lactose

- Lactose – the sugar in milk
  - Lactase is the enzyme that breaks down Lactose
  - Lactase is released from the wall of the small intestine
  - Lactase production diminishes with age in most
- Most adults (60+%) lack sufficient Lactase




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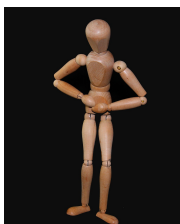
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## Milk Sugar - Lactose

- Symptoms of Lactose Intolerance:
  - Nausea
  - Bloating
  - Pain
  - Cramps
  - Gas
  - Diarrhea




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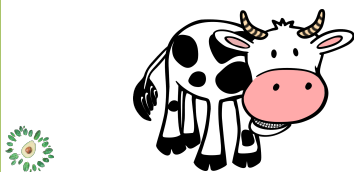
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## Milk Protein - Casein

- Casein is the Protein in Dairy
  - 13 types of Casein
  - A1 and A2 most common casein proteins




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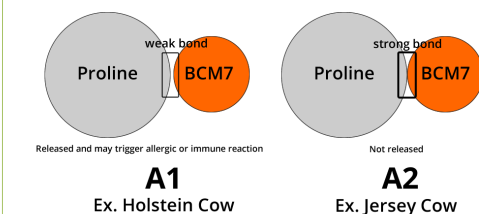
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## Mutation 5000 Years Ago




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## Symptoms linked to A1 Dairy

- A1 Casein found in milk from Holstein Cows is More Allergenic
  - Protein "BCM 7" (beta-casomorphin 7) is released and may lead to:
    - Allergic Reactions
    - Autoimmune Conditions
    - Neurological Conditions




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## Symptoms linked to A1 Dairy

- Allergic Reactions
  - Fatigue, Irritability, inattentiveness etc.
- Autoimmune Conditions (Antibodies to “BCM7”)
  - Type 1 Diabetes and LADA (adult onset)
  - Other Auto-Immune Diseases
- Neurological Conditions
  - Autism, Schizophrenia



Source: <https://www.ncbi.nlm.nih.gov/pubmed/12198602>




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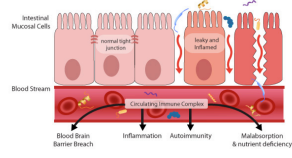
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## Milk Protein - Casein

- Milk Protein may activate immune system when there is “Leaky Gut”
- Breast milk does not contain A1 Casein




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## Milk Protein - Casein

- A2 Casein from Jerseys, Asian and African cows, Goat, Buffalo, Sheep
- “Non-commercial milk”
- May be an alternative to A1 dairy when:
  - Gut has healed
  - No symptoms
  - No anti-bodies to casein




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## Not Really Dairy Free

- Beware of hidden dairy
- Casein and milk solids in many processed foods:
  - Dark Chocolate
  - Tuna (hydrolyzed caseinate)
  - Soups
- Read Labels




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**OBVIOUS DAIRY CONTENT**

MILK CREAM	BUTTER CHEESE	YOGURT KEFIR	ICE CREAM SOFT ICE CREAM
Condensed milk Cream Butter Cheese Cream cheese Ice cream Soft ice cream Ice cream cake Ice cream cones Ice cream sandwiches Ice cream sticks Ice cream tubs Ice cream cups Ice cream cones Ice cream sticks Ice cream tubs Ice cream cups	Condensed milk Butter Cheese Cream cheese Ice cream Soft ice cream Ice cream cake Ice cream cones Ice cream sandwiches Ice cream sticks Ice cream tubs Ice cream cups	Condensed milk Butter Cheese Cream cheese Ice cream Soft ice cream Ice cream cake Ice cream cones Ice cream sandwiches Ice cream sticks Ice cream tubs Ice cream cups	Condensed milk Butter Cheese Cream cheese Ice cream Soft ice cream Ice cream cake Ice cream cones Ice cream sandwiches Ice cream sticks Ice cream tubs Ice cream cups

**PRODUCTS THAT MAY CONTAIN DAIRY**

PROCESSED FOODS & SNACKS	INGREDIENTS
Hot dogs Burgers Lunch meat Marinade Sausage Candy Non-dairy products	Chocolate, dark Caramel candy Nougat Ice cream Candy Non-dairy products

**SAUCES & CONDIMENTS**

SAUCES & CONDIMENTS	OTHER
Dressings Sauces Marinades	Medications Supplements

\*Read labels carefully. When in doubt, go without! This list is not exhaustive.

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## Testing

- Tests are not always reliable
- Best test is to eliminate all dairy/casein




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## Goodbye to Dairy

- Avoid Dairy for at least 2 Months and see what happens




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## Hello Bone Broth




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## Collagen

- Body's natural ability to repair Connective Tissue declines with age
- Collagen Build Connective Tissue
  - Joint and Bone Health
  - Tendons and Ligaments
  - Skin, Hair and Nails




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## Collagen

- Collagen is Gut Healing and Nourishing
- Collagen contains amino acids like Glycine and Proline
  - Bone Broth Rich Source of Collagen




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## Collagen Sources

- Chicken Collagen
  - Digestion, Skin and Immunity
- Bovine Collagen
  - Skin, Sleep and Muscle Repair
- Fish Collagen
  - Anti-aging and Best Bioavailability



<https://draxe.com/tag/major-sources-of-collagen/>

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## Bone Broth

- Make Your Own Bone Broth
- Use what you have that's organic or wild
  - Bones, marrow, necks, roasted chicken carcass
- Boost breakfasts, snacks, base for soups & stews
- Join the Bone Broth Trend! ☺




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## Collagen | Gelatin

- Powdered Collagen & Gelatin
  - Stir in to cold water or add to smoothies
  - Make “Gummies” with Gelatin
- Make sure ingredients are
  - Organic
  - Grassfed
  - Pastured




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## Bone Broth – Basic Recipe

- 1 Roasted Chicken Carcass + Bones
- Cover with filtered water
- 2 Tbsp Apple Cider Vinegar
- Optional:
  - 2 Carrots
  - 1 Onion
  - 2 Celery Stalks
  - 1-2 Garlic Cloves
  - 1 Bay Leaf
  - 8 Peppercorn
  - Dried or fresh thyme and or rosemary




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## Bone Broth – Basic Recipe

- Instant Pot Method
  - Place all ingredient in instant pot and cook on high pressure for 2 hours, let pressure come down naturally.
  - Strain in to 1 L glass jars
    - Store in fridge for 3-4 days or freeze
    - If freezing, leave at least 1 inch at the top of jar
  - Use as is, in soups, stews or spin with fat for a “latte” style broth
  - Add sea salt at time of use to taste




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## Bone Broth - Basic Recipe




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## Bone Broth – Basic Recipe

- Slow Cooker Method
  - Place all ingredient in slow cooker and cook on low for 24 hours.
  - Strain in to 1 L glass jars
    - Store in fridge for 3-4 days or freeze
    - If freezing, leave at least 1 inch at the top of jar
    - Use as is, in soups, stews or spin with fat for a “latte” style hot drink
  - Add sea salt at time of use to taste




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## Bone Broth

- Make or try some bone broth this week!




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## Movement & Nature




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## Movement & Nature

- 2 for 1 Deal!
  - Nature + Outdoor Benefits
  - Movement Benefits




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## Movement Benefits

- Movement Benefits
  - Cardio Vascular
    - HIIT (High Intensity Interval Training)
  - Structural
    - Bones
    - Muscles & Connective Tissue
  - Mental & Brain Health
    - Brain Chemical Boost from exercise BDNF
      - Brain-Derived Neurotrophic Factor is Brain Healing
    - “Better Than Any Drug” (Endorphins)




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## Movement Benefits

- Find the type of Movement that fits your level of fitness and state of health
- Do Movement you enjoy so you show up
- Be aware of:
  - Recovery time
  - Stress response from prolonged cardio
  - Adrenal health



How movement at end of day impacts sleep

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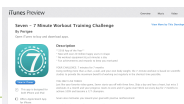
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## Seven Minute Workout

- This is a workout to change your brain chemistry and stimulate BDNF
  - Use an app like “7 minutes by Perigee” or similar
    - Or do your favorite move(s) Ex. Jumping Jack
    - Intervals of 30 sec:10 sec Movement:Rest for 5-7 minutes at intensity that is right for your level of fitness and state of health




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## Nature + Outdoor Benefits

- Bright Light Exposure Essential
- Reinforces Circadian Rhythm
- Go Outside Before Noon
  - Sunny day 50,000 lux
  - Cloudy day 2500 lux
  - Well lit office approx. 500 lux
  - Social dim lighting 100 lux




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## Nature + Outdoor Benefits

- Most need 1500 – 2000 lux for 30 min/ day at a minimum to prevent SAD
- Light Box Therapy 10,000 lux during winter months if needed
- Vitamin D
  - Sunlight on bare skin provide Vit D
  - Supplement with Vit D3 (test vit D levels)




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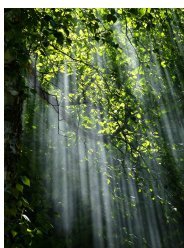
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## Nature Benefits

- “Forest Bathing”
  - Benefit of being among trees for mental well-being
  - Counters Screen Time
  - “Nature Deficit Disorder”
- Head for the Woods!




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## Next Class

- Protein - Building Blocks of Life
- Protein In Your Body
- Protein in Your Diet
- Relationships & Community

Amino Acids in the Human Body	
Essential	Non-Essential
isoleucine	alanine
leucine	asparagine
lysine	aspartic acid
methionine	cysteine
phenylalanine	glutamic acid
threonine	glutamine
tryptophan	proline
valine	serine
	glycine

\* Conditional – see footnote




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