



Eating for a Healthy Gut



Outline

- What makes a healthy gut?
 - Gut microbiota
- Gut Bacteria
- Probiotics
- Prebiotics
- Activity



What Makes a Healthy Gut?

- Human gut (intestines) are filled with trillions of microorganisms, most live in the colon
- These microorganisms are called the *Gut Microbiota*
- These microorganisms are important to keep us healthy!
- Microbiota video:
<http://cdhf.ca/en/videos/introducing-the-human-gut-microbiome>



Gut Bacteria

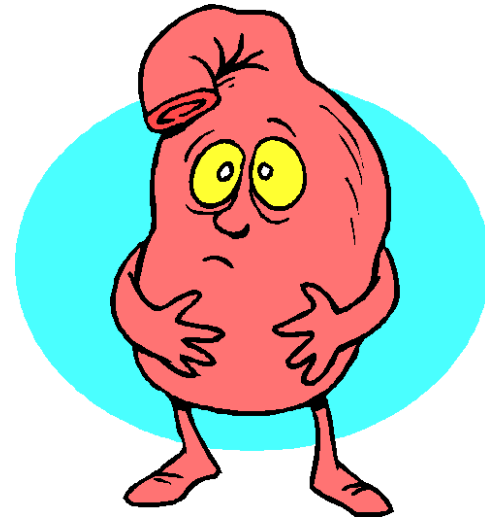
- Help with immune system
- Help with digestion
- Help protect us from bad bacteria

- Unbalanced gut bacteria= increased risk for disease
- Balance + Diversity = Healthy gut!



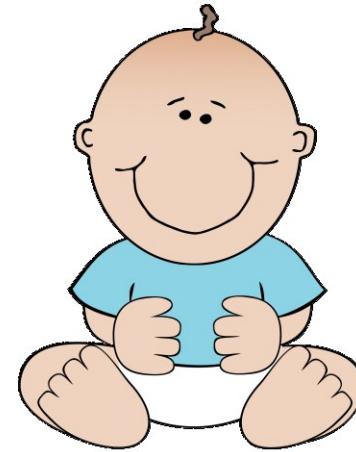
Gut Bacteria

- Imbalance is associated with disease:
 - Colorectal Cancer
 - Obesity
 - Diabetes
 - Allergies
 - Asthma
 - Irritable Bowel Syndrome (IBS)
 - Inflammatory Bowel Disease (IBD)



What can affect our gut bacteria?

1. Mode of delivery (how we are born)
2. Infant feeding
3. Antibiotics
4. Environment
5. Diet
 - a. Probiotics
 - b. Prebiotics



What can affect our gut bacteria?

1. Mode of Delivery

- The way we are born affects the first types of bacteria to grow in our gut

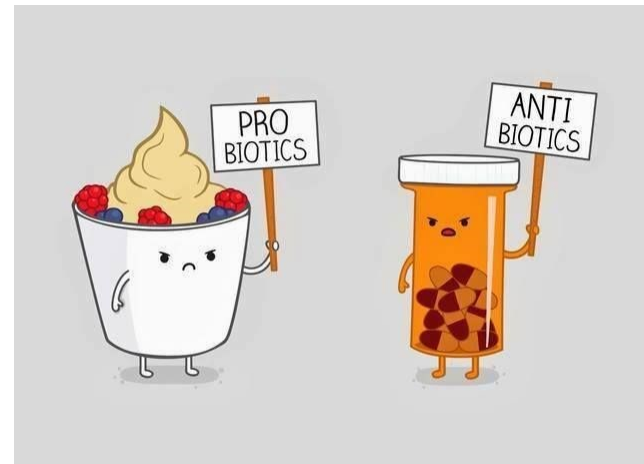
2. Infant Feeding

- How we are first fed helps to grow the bacteria in our gut
 - Breastfeeding
 - Formula
- Once we are about 2 ½ years old, we have our “adult” gut bacteria

What can affect our gut bacteria?

3. Antibiotics

- Can kill the good and bad bacteria



4. Environment

- Exposes us to a variety of bacteria throughout our life

What can affect our gut bacteria?

5. DIET

- What we eat impacts our gut bacteria and overall gut health
- Food helps to increase the diversity, balance of bacteria in our gut... and so much more!

- Probiotics
- Prebiotics



Probiotics

- Probiotics are live, non-pathogenic microorganisms that are thought to be beneficial to the health of the host
- Known benefits of probiotics:
 - Helps with digestion
 - Promotes regularity
 - Improves nutrient absorption
 - Helps keep a balance of “good” bacteria in the gut



Probiotic Guidelines

In order for microorganisms to be considered a probiotic they must:

1. Be able to survive the digestion process
2. Not toxic
3. Remain alive during transport and storage
4. Have beneficial effects
5. Help balance gut microbiota
6. Help protect against bad bacteria

Probiotic Products

- Probiotics come in a variety of forms:
 - Supplements (Pills, Capsules, Powders)
 - Added to food products
 - Naturally occurring in food
 - Fermented foods: use of yeast or bacteria to create flavor and preserve food

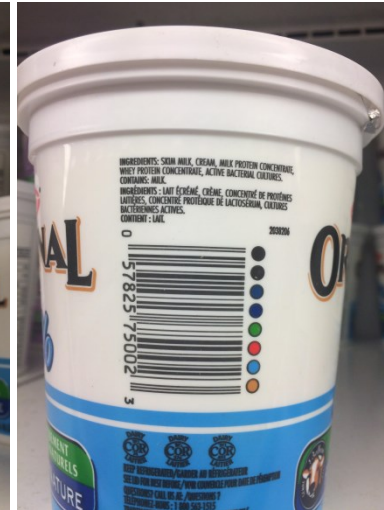


NOTE: Probiotics must be taken regularly, since they do not grow in the gut

Foods Containing Live Bacteria

Naturally containing:

- Sauerkraut
- Kimchi
- Kefir
- Some types of pickles
- Yogurt



Probiotics sometimes added to:

- Yogurt
- Juice
- Gum
- Milk
- Ice cream
- Chocolate



Prebiotics

- A non-digestible food ingredient that helps the growth of good bacteria in the gut
- Known benefits:
 - Help feed good bacteria in the gut
 - Help good bacteria grow and multiply
 - Help with constipation



Foods Containing Prebiotics

- Often found in high fibre foods
- Foods such as:
 - Whole grains
 - Fruits and vegetables
 - Ex. Onions, garlic, leeks, soybeans
- Ingredients such as :
 - Inulin
 - Pectin
 - Resistant starch
 - Oligosaccharide (in breast milk)



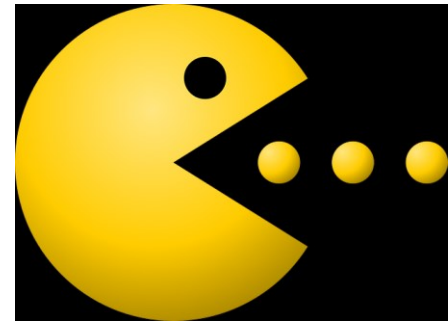
Food, Pills, Capsules, Powders... What do I choose?

- There is not enough research yet to say which form of probiotic is best
- There is no recommended dose yet
- Certain strains may help people with certain disease conditions (ex. IBS, IBD)
- Everyone has a different gut microbiota, there is no guarantee that one type of probiotic will be as beneficial for everyone
- Read labels to be aware of what you are consuming



So, how do we keep our gut healthy?

1. Feed the “good” gut bacteria
 - Eat high fibre foods: whole grain breads, pastas, cereals and rice
 - Load up on veggies and fruit
 - Breastfeed infants
2. Drink lots of water
3. Add in extra “good” bacteria
 - Try incorporating a probiotic food each day
 - Ex. Plain Yogurt



Start Slow!

Activity: Probiotic, Prebiotic or Neither?

- We are now going to go through some examples of foods
- Guess if it is a **Probiotic Food**, a **Prebiotic Food**, or **Neither**
- ** Fermented foods
will be considered a
Probiotic for this activity



1) Dill Pickles



1) Dill Pickles



Neither!

2) Banana

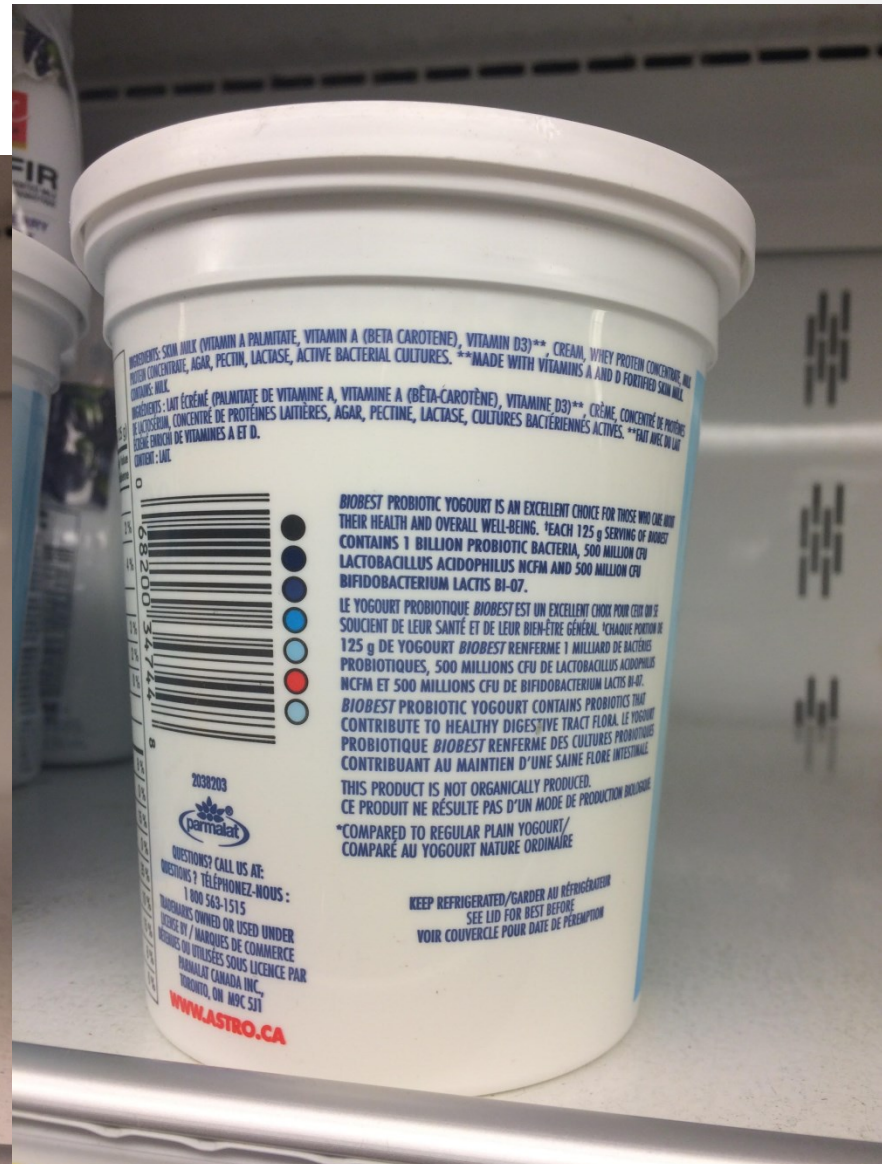


2) Banana



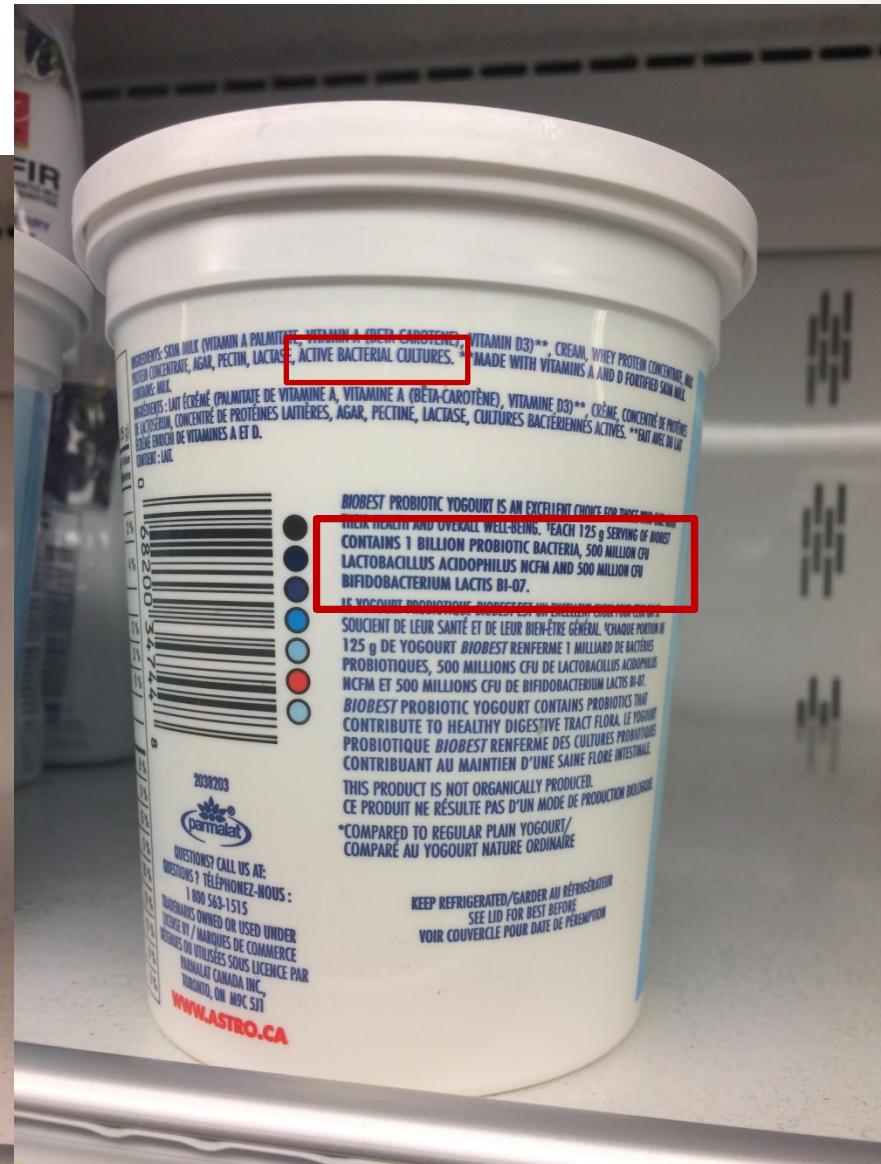
Prebiotic

3) Yogurt



3) Yogurt

Probiotic!



4) Onion



4) Onion



Prebiotic

5) White Bread



5) White Bread



Neither!

6) Asparagus



6) Asparagus

Prebiotic



7)Garlic

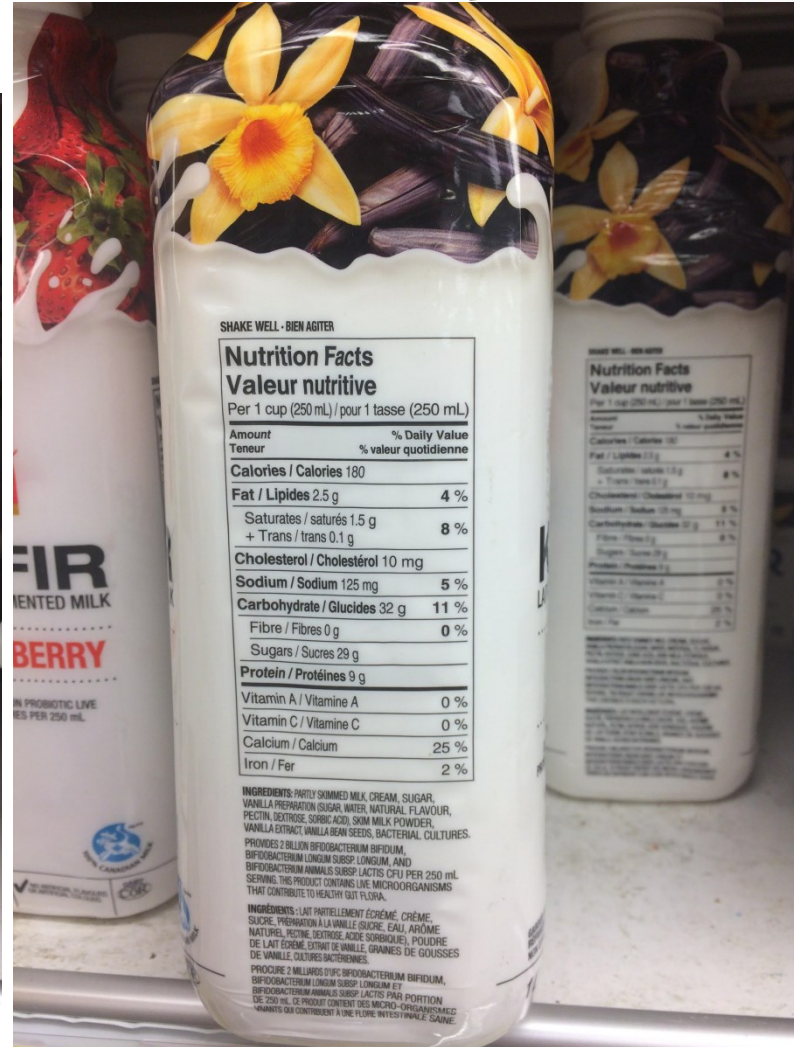


7) Garlic



Prebiotic

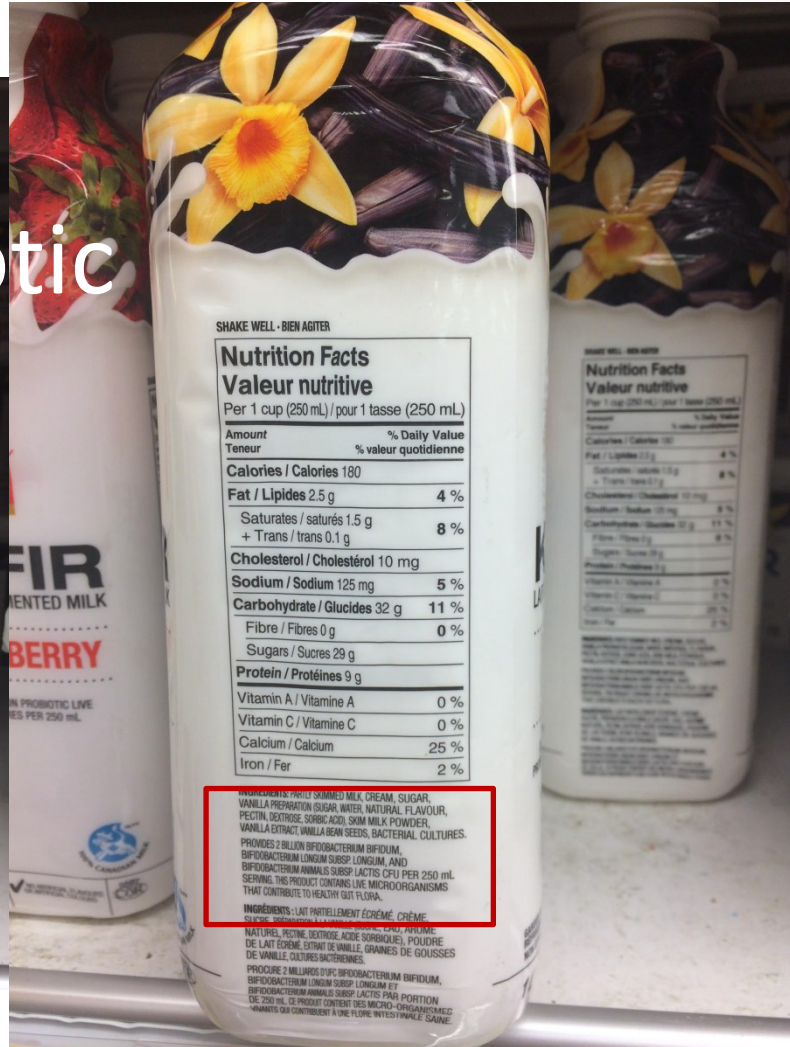
8) Kefir (Fermented Milk)



8) Kefir (Fermented Milk)



Probiotic



9) Chocolate



9) Chocolate



Neither!

10) Fermented Sauerkraut

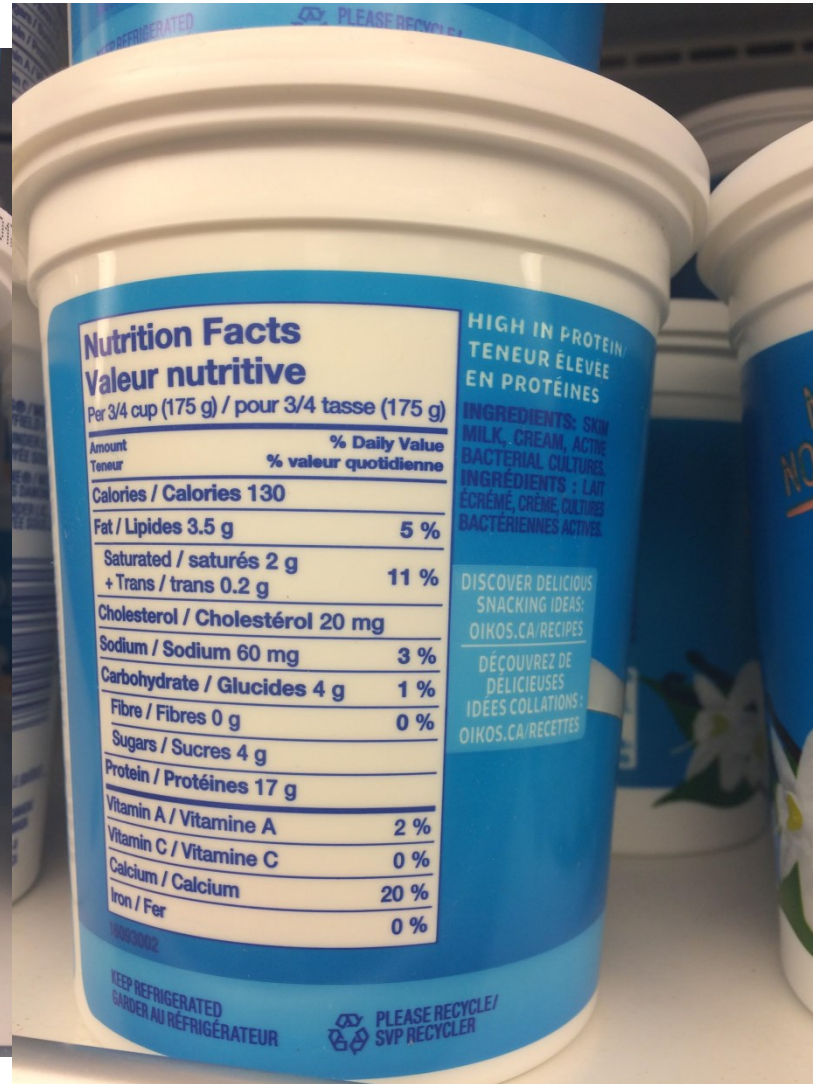


10) Fermented Sauerkraut

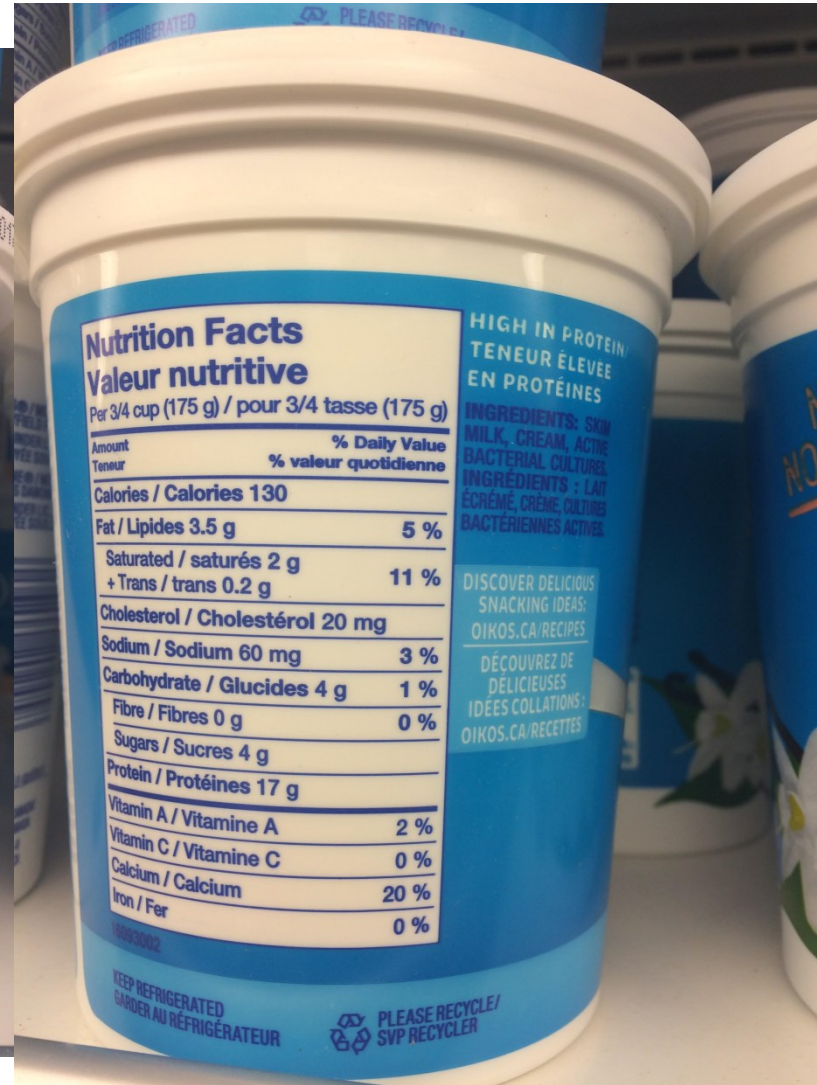


Probiotic

11) Greek Yogurt



11) Greek Yogurt



Juice



Tropicana
essentials

PROBIOTICS



strawberry banana
fraise et banane

NO ADDED SUGAR OR ARTIFICIAL FLAVOURS
SANS SUCRE AJOUTÉ ET SANS ARÔME ARTIFICIEL

100% JUICE AND PURÉE BLEND
FROM CONCENTRATE WITH OTHER INGREDIENTS
MÉLANGE DE JUS À 100 % ET DE PURÉES
FAITS DE CONCENTRÉ
AVEC D'AUTRES INGRÉDIENTS

140
CALORIES

946 mL

Tropicana
essentials

PROBIOTICS



peach passion fruit
pêche et fruit de la passion

NO ADDED SUGAR OR ARTIFICIAL FLAVOURS
SANS SUCRE AJOUTÉ ET SANS ARÔME ARTIFICIEL

100% JUICE AND PURÉE BLEND
FROM CONCENTRATE WITH OTHER INGREDIENTS
MÉLANGE DE JUS À 100 % ET DE PURÉES
FAITS DE CONCENTRÉ
AVEC D'AUTRES INGRÉDIENTS

130
CALORIES

946 mL

strawberry banana
fraise et banane

BEST BEFORE/MEILLEUR AVANT :

JN 21 / NCGA 08 31

Nutrition Facts
Valeur nutritive
Per 250 mL / par 250 mL

Amount Teneur	% Daily Value % valeur quotidienne
Calories / Calories 140	
Fat / Lipides 0 g	0 %
Saturated / saturés 0 g	0 %
+ Trans / trans 0 g	
Cholesterol / Cholestérol 0 mg	0 %
Sodium / Sodium 2 mg	0 %
Potassium / Potassium 330 mg	9 %
Carbohydrate / Glucides 33 g	11 %
Fibre / Fibres 0 g	0 %
Sugars / Sucres 29 g	0 %
Protein / Protéines 1 g	0 %
Vitamin A / Vitamine A	0 %
Vitamin C / Vitamine C	150 %
Calcium / Calcium	0 %
Iron / Fer	0 %

INGREDIENTS: FRUIT JUICES FROM CONCENTRATE (WATER, APPLE, PASSION FRUIT), PUREES FROM CONCENTRATE (WATER, BANANA, STRAWBERRY), BIFIDOBACTERIUM LACTIS, COLOUR, NATURAL FLAVOUR, ASCORBIC ACID (VITAMIN C)
INGRÉDIENTS: JUS DE FRUITS FAITS DE CONCENTRÉ (EAU, POMME, PASSION, PURÉES FAITES DE CONCENTRÉ (EAU, BANANES, FRAISES), BIFIDOBACTERIUM LACTIS, COLORANT, ARÔME NATUREL, ACIDE ASCORBIQUE (VITAMINE C)

MORE THAN 1 BILLION ACTIVE PROBIOTICS PER 250 mL
PLUS DE 1 MILLIARD DE PROBIOTIQUES ACTIFS PAR 250 mL

Questions et commentaires? Questions ou commentaires?
1-800-237-7799 www.tropicana.ca

Tropicana Products, Inc., Bradenton, Florida 34208, USA



20182-01 31001158100

peach passion fruit
pêche et fruit de la passion

BEST BEFORE/MEILLEUR AVANT :

JN 28 17 / NCGA 08 41

Nutrition Facts
Valeur nutritive
Per 250 mL / par 250 mL

Amount Teneur	% Daily Value % valeur quotidienne
Calories / Calories 130	
Fat / Lipides 0 g	0 %
Saturated / saturés 0 g	0 %
+ Trans / trans 0 g	
Cholesterol / Cholestérol 0 mg	0 %
Sodium / Sodium 15 mg	1 %
Potassium / Potassium 390 mg	11 %
Carbohydrate / Glucides 32 g	11 %
Fibre / Fibres 2 g	6 %
Sugars / Sucres 27 g	0 %
Protein / Protéines 1 g	0 %
Vitamin A / Vitamine A	4 %
Vitamin C / Vitamine C	140 %
Calcium / Calcium	0 %
Iron / Fer	0 %

INGREDIENTS: FRUIT JUICES FROM CONCENTRATE (WATER, APPLE, PASSION FRUIT), PUREES FROM CONCENTRATE (WATER, BANANA, PEACH), BIFIDOBACTERIUM LACTIS, ASCORBIC ACID (VITAMIN C), CITRIC ACID, NATURAL FLAVOUR
INGRÉDIENTS: JUS DE FRUITS FAITS DE CONCENTRÉ (EAU, POMME, PASSION, PURÉES FAITES DE CONCENTRÉ (EAU, BANANES, PÊCHE), BIFIDOBACTERIUM LACTIS, ACIDE ASCORBIQUE (VITAMINE C), ACIDE CITRIQUE, ARÔME NATUREL

MORE THAN 1 BILLION ACTIVE PROBIOTICS PER 250 mL
PLUS DE 1 MILLIARD DE PROBIOTIQUES ACTIFS PAR 250 mL

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WBRY

TROP PROBIOTICS PCH

PSNEBUT

Juice

Probiotic



For More Information...

Gut Microbiota

<http://www.gutmicrobiotaforhealth.com/en/home/>

<http://cdhf.ca/en/staying-healthy/your-microbiota/section/about>

<http://loveyourtummy.org/>

Probiotics/Prebiotics

<http://cdhf.ca/en/staying-healthy/pre-probiotics/section/resources>

http://cdhf.ca/bank/document_en/72understanding-probiotics-.pdf#zoom=100

<http://cdhf.ca/en/videos/pre-and-probiotics>

<http://uat.eatrightontario.ca/en/Articles/Probiotics/prebiotics/Prebiotics.aspx>

<http://www.eatrightontario.ca/en/Articles/Digestion/The-Pros-of-Probiotics.aspx>

Thank You!

Questions?

References

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