A photograph of a man and a woman in a clinical or office setting. The man, on the left, has curly brown hair and a beard, wearing a dark blue t-shirt. He is looking towards the woman. The woman, on the right, has long blonde hair in a ponytail, wearing teal scrubs. She is gesturing with her hands while looking at a computer monitor. The monitor displays a website with various charts and text. A desk lamp is visible behind the woman. The background is a light-colored wall with some papers or charts.

Chattanooga Autism
Symposium 2024

Nourishing Neurodiversity: Nutrition and Physical Activity

Melissa Perry, RDN, CDCES

Registered Dietitian and Certified
Diabetes Care and Education Specialist
with BlueCare



Cassie Wanamaker, MA, CHES

Health Educator with BlueCare



Objectives

- Importance of a Healthy Diet
- Keys to a Healthy Diet
- Nutrition Focus in Autism
- Common Barriers to Healthy Eating in Adults with Autism
- Resources for Healthy Eating
- Benefits of Physical Activity for Autism
- SMART Goals



SECTION TITLE

Importance of a Healthy Diet

- › Reduces risk of certain diseases and cancer
- › Healthy weight for your body
- › Better sleep
- › Improved mood and energy



NUTRITION

Keys to a Healthy Diet



Fruits and Vegetables

Vitamins and minerals
Fiber



Protein

Muscle growth
Keeps you fuller, longer
Makes hormones and enzymes
Healing
Transports nutrients to body cells
Found in animal and plants (meat, eggs, dairy, beans, nuts, seeds, grains, soy products)



Fats

Brain and heart health
Help absorb certain vitamins
Reduce inflammation
Keep you fuller, longer
Found in plant oils, nuts, seeds, olives, fatty fish, etc.



Water

Every body function requires water
Transports nutrients
Protects joints and organs
Regulates body temperature
Improves digestion
Gets rid of toxins

Nutrition Focus in Autism

Brain health

- Omega 3 Fatty Acids
 - Oily fish (tuna, salmon, sardines)
 - Flaxseeds
 - Chia seeds
 - Supplement

Gut Health

- Probiotic foods (fermented foods) can help balance gut flora and improve digestion
 - Yogurt
 - Sauerkraut
 - Pickles
 - Kimchi
 - Kefir
 - Semi hard cheese
 - Tempeh
- Probiotic supplement*
- Fiber
 - Fruits, vegetables, whole grains

Common Barriers to Healthy Eating in Adults with Autism

Issues with
Interoception

Selective
Eating &
Sensory Issues

Gastrointestinal
issues

Allergies and
Intolerances

NUTRITION

Interoception

Interoception: being aware of how your body feels

- › Hunger and Fullness
 - People with Autism may ignore these cues
 - Can cause overeating or meal skipping



Solutions

- › Eat consistent meals and snacks
 - Set an alarm
 - Plan out meals and snacks for the day
- › Practice eating slower
 - Give yourself at least 20 minutes to eat a meal
 - Put fork or spoon down between bites
 - Avoid eating in a distracting environment

Selective Eating & Sensory Issues



Texture

Smell



Eating environments



Food Neophobia:
Fear of trying
new foods



Specific Food Preferences



Selective Eating and Sensory Issues

Solutions

Introduce new foods in small amounts for several days or weeks

Eat in a calm space

Try new foods prepared in different ways

Feeding Therapy

Changes texture and taste

Add food enhancers like cheese or a dipping sauce

“Hide” new foods in other foods (add shredded vegetables to spaghetti)

NUTRITION

Gastrointestinal Issues

GI issues are more common in people with Autism

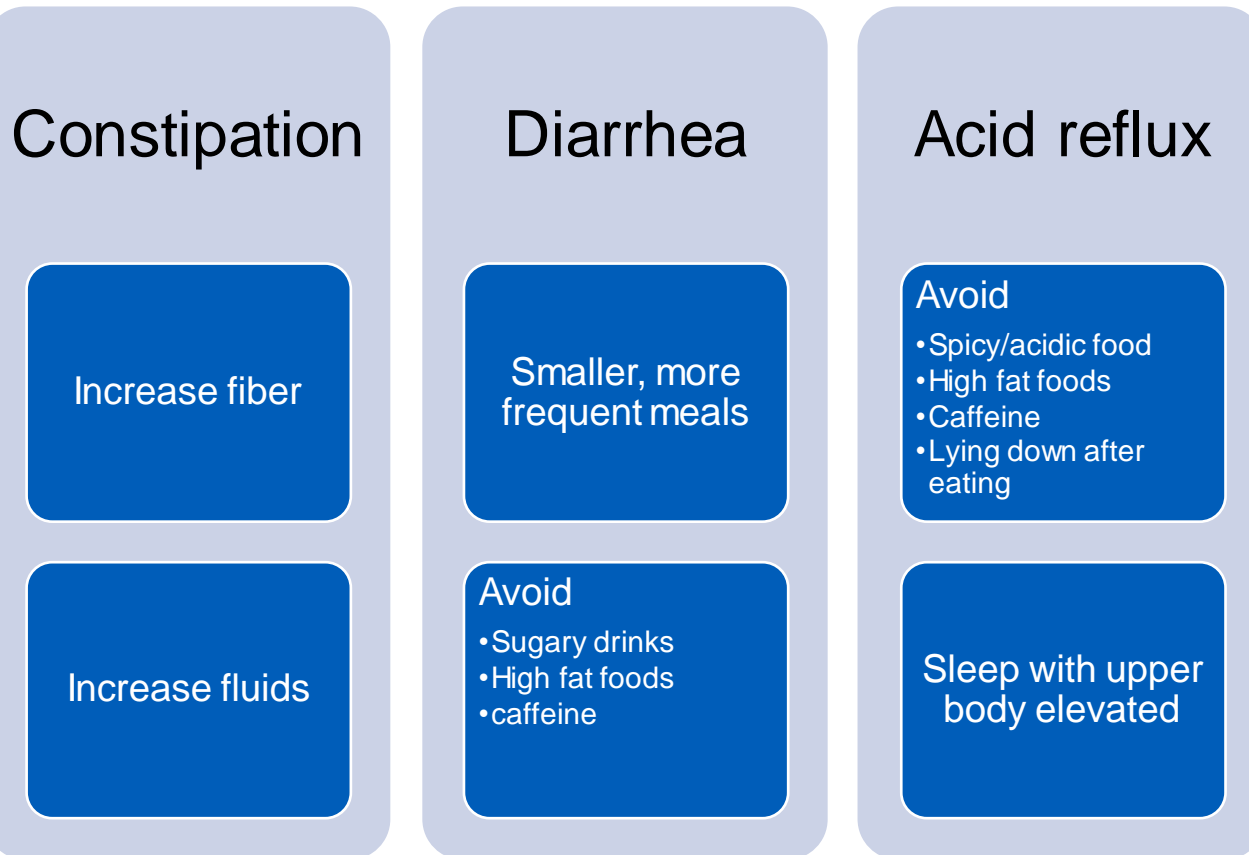
- › Reasons why vary
 - Altered gut microbiota
 - Stress/psychosocial reactions
 - Limited diet (not enough fiber, more processed foods, less water, etc.)

- › Chronic Constipation
- › Diarrhea
- › Acid reflux
- › Irritable Bowel Syndrome
- › Stomach discomfort/bloating



Gastrointestinal Issues

Solutions



Gastrointestinal Issues

Food Allergies and Intolerances

- › Food allergies (should be diagnosed with an allergy test)
 - Casein
 - Whey
 - Peanuts
 - Tree Nuts
 - Shellfish
 - Soy
- › Lactose Intolerance
 - Can cause GI discomfort, diarrhea in some people
 - Found in many dairy products
- › Gluten Intolerance
 - Causes severe GI discomfort in people with Celiac disease
 - No evidence of gluten intolerance in people without Celiac disease, but some people feel it is helpful to eliminate gluten in their diet

Resources for Healthy Eating

A Balanced Plate

HEALTHY EATING PLATE

Use healthy oils (like olive and canola oil) for cooking, on salad, and at the table. Limit butter. Avoid trans fat.



The more veggies – and the greater the variety – the better. Potatoes and French fries don't count.

Eat plenty of fruits of all colors.



STAY ACTIVE!

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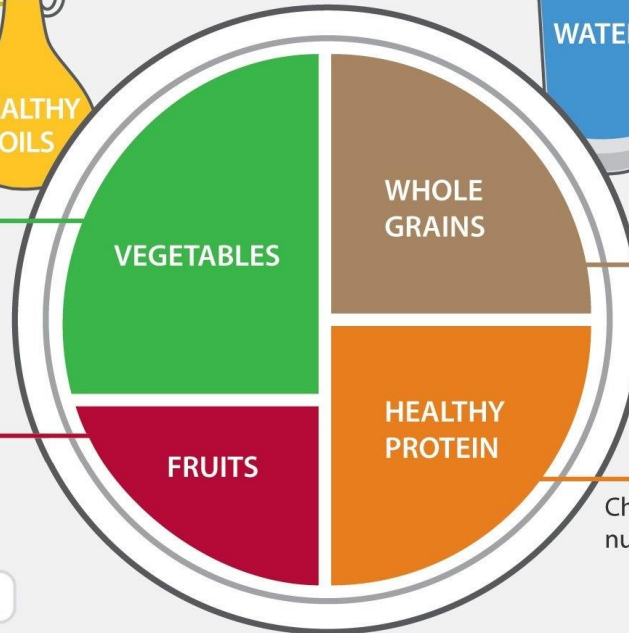
Harvard T.H. Chan School of Public Health
The Nutrition Source
www.hsph.harvard.edu/nutritionsource



Drink water, tea, or coffee (with little or no sugar). Limit milk/dairy (1-2 servings/day) and juice (1 small glass/day). Avoid sugary drinks.

Eat a variety of whole grains (like whole-wheat bread, whole-grain pasta, and brown rice). Limit refined grains (like white rice and white bread).

Choose fish, poultry, beans, and nuts; limit red meat and cheese; avoid bacon, cold cuts, and other processed meats.



Harvard Medical School
Harvard Health Publications
www.health.harvard.edu



Resources for Healthy Eating

Visual Recipes:

- › Autism Grown Up:
<https://www.autismgrownup.com/collections/visual-recipes>
- › Accessible Chef:
<https://accessiblechef.com/recipes/>
- › Able 2 Learn:
<https://able2learn.com/categories/cooking/no-cook.html>

Increasing Nutrients:

- › Life Skills Autism Academy:
<https://www.lifeskillsautismacademy.com/blog/10-great-recipes-to-secretly-add-veggies-to-your-little-ones-diet>
- › American Heart Association:
<https://www.heart.org/en/healthy-living/healthy-eating/add-color/sneaking-more-vegetables-into-meals>
- › Have a Plant:
https://fruitsandveggies.org/topics/cooking-style/30-minutes-or-less/?gad_source=1&gclid=EAlaIQobChMI45eUz56phwMV2nJ_AB1pgAZ-EAMYASAAEgItyPD_BwE

General Healthy Recipe Resources:

- › Food Hero:
<https://foodhero.org/>
- › MyPlate:
<https://www.myplate.gov/myplate-kitchen/recipes>

Benefits of Physical Activity for Autism

- Improved Social and Communication Skills
- Reduced Anxiety
- Increased energy
- Improved mobility
- Improved coordination
- Muscle and Bone Strengthening
- Improved Sleep
- Reduced risk for conditions such as Cardiovascular Disease, Diabetes, High Blood pressure, and High Cholesterol
- Improves mood
- Reduces Stress
- Reduces symptoms of depression and anxiety
- Increases self-esteem
- Improved overall health



Recommendations of Physical Activity for Autism

30 minutes of physical activity 4-5 days per week

Flexibility Exercise

- Stretching, yoga
- Improves mobility and range of motion

Balance Exercise

- Balance on one leg, tai chi, yoga
- Helps prevent falls

Strength Training

- Lifting weights, carrying in groceries, resistance bands
- Builds muscle

Aerobic Exercise

- Walking, running, biking, swimming, dancing
- Keeps heart and mind healthy

How to get started exercising



Make a plan



Establish goals



Find venue that fits your needs



Start slowly and build gradually



Find Support




Where to Start?

Choose 1-2 small goals and make them SMART

DIETITIANS ON DEMAND
How to
Set SMART Goals 

- S** **Specific**
Break it down List each step you will need to achieve your goal.
- M** **Measurable**
How will you know you have met your goal? Define how many, how much, and when.
- A** **Achievable**
Goals should be realistic. Achieving milestones builds confidence.
- R** **Relevant**
Choose a goal that is important to you. You will be willing to invest your time and energy into it.
- T** **Time-bound**
When do you want to complete your goal? Set a deadline.

Check out these SMART goals:

-  I will walk for 20 minutes during my lunch break three days per week.
-  I will eat an extra serving of fruit with each meal at least five days per week.
-  I will spend 1 hour once a week to plan my meals.



Questions?

Thank You



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