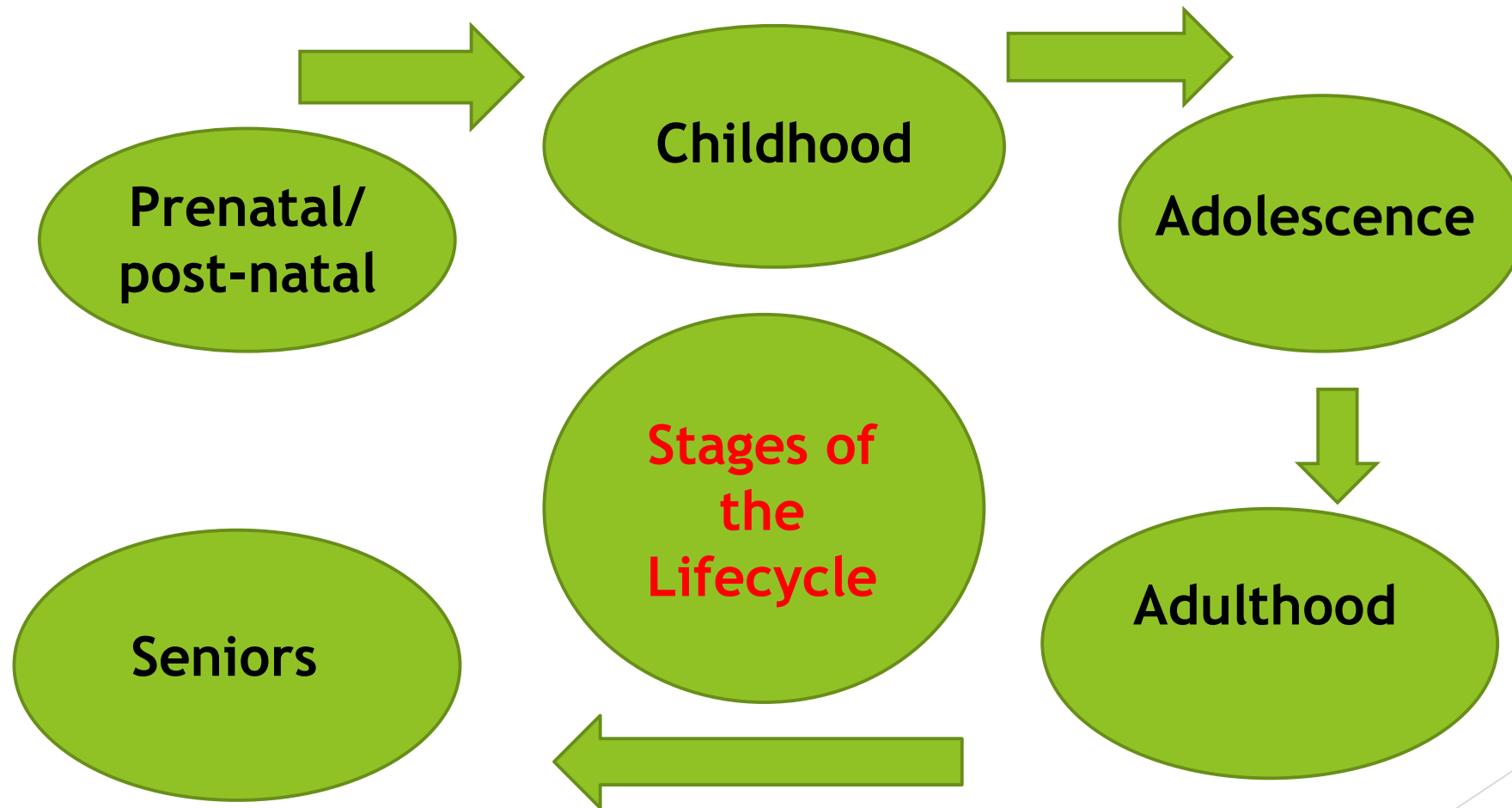




# Unit Three: Nutrition Over the Lifecycle



# Stages of the Lifecycle



# Prenatal Health

- ▶ If someone told you there was a magical pill that would prevent your future, unborn child from developing a serious condition, would you believe them?



# Prenatal Vitamins and their importance



- ▶ Prenatal vitamins contain an essential vitamin for fetal development. This vitamin is called FOLATE
- ▶ Folate can be very beneficial for the human body but relies on the presence of the vitamin B12 in order to become activated in the body.
- ▶ This is why many health experts suggest that pregnant women take a folic acid supplement along with a multivitamin or simply a prenatal vitamin).

# Why is it so important?

- ▶ It is especially important for women of childbearing age since it has been shown to reduce the incidences of neural tubular defects (affecting the developing brain and spinal cord) by 50%
- ▶ Eg. Spina bifida
- ▶ If a defect does occur, it is during the first month of pregnancy which explains why taking this supplement is so important before becoming pregnant
- ▶ May also help prevent miscarriages
- ▶ This vitamin also plays an important role in defending against heart disease
- ▶ Protects against cancer for individuals who are at risk of developing pancreatic cancer (men who smoke) and breast cancer (women who drink alcohol excessively).

# What food sources contain folic acid?

- ▶ Asparagus
- ▶ Cooked spinach
- ▶ Broccoli
- ▶ Romaine lettuce
- ▶ Kidney beans
- ▶ Orange juice
- ▶ Sunflower seeds
- ▶ Fortified grain products



★ Since 1998 most Canadian cereals and grain products have been fortified with folic acid. As a result, neural tube defects have decreased by 50%.



# To ensure that they stay healthy as well as their unborn baby, a pregnant woman should:

- ▶ Eat healthy and follow the Canadian Food Guide for pregnant or nursing mothers (**Grain Products=5-12 servings, Fruits & Vegetables=5-10 servings, 3-4 servings of milk, 2-3 meat and alternatives**).
- ▶ Eat smaller portions continually throughout the day. Plan to add approximately 300 calories to your diet for healthy fetal development.
- ▶ Take a maternal vitamin that contains 400mg of folic acid (prevents birth defects such as **Spina Bifida**).
- ▶ Exercise safely and moderately.
- ▶ Get lots of rest!
- ▶ Check your home for lead-based paints, fumes, or chemicals that could harm the development of the fetus.



# A pregnant woman should avoid or limit:

- ▶ Hazardous prescription drugs (talk to your doctor before taking any medications).
- ▶ Avoid caffeine and artificial sweeteners in all beverages.
- ▶ Limit the amount of processed meats (cold cuts) as they are high in nitrates
- ▶ Avoid unpasteurized dairy products since they are have higher chances of containing harmful bacteria
- ▶ Avoid eating shark, swordfish, shellfish, and other kinds of fish (they contain high levels of mercury which can cause damage to the developing brain of the fetus).





# Absolute NO-NO'S!

- ▶ **Stop smoking** and taking ANY non-prescription drugs or herbal remedies of any kind.
- ▶ **Don't drink any amount of alcohol**, especially during the **first trimester** since this is when most damage is done to the fetus from alcohol. (Another reason why it's important that you are aware of when you will become pregnant; planning for pregnancy!)



# Childhood

- ▶ Eating patterns that develop in childhood are very important since they will determine (for the most part) what that individual's eating patterns are for the rest of their life.
- ▶ The consequences of unhealthy habits will have long-term negative effects, such as obesity, heart disease, and diabetes. Research has shown that poor habits developed in childhood put adults at risk.



# Problems Caused by Unhealthy Eating Habits during Childhood

- ▶ **Psychological problems**, including lack of self-esteem and depression.
- ▶ **Breathing disorders** since being obese can put a strain on your respiratory system.
- ▶ **Bone and joint problems** later in life. This could be because of a lack of calcium which causes poor bone development and a deficiency in bone density.
- ▶ **Diabetes Type 2** used to be only found to develop in adults over 45 due to obesity issues but is happening in children in huge numbers
- ▶ **High cholesterol, heart disease**, and strokes, hypertension or high blood pressure
- ▶ **Gallbladder disease** due to high fat contents in foods



# Factors Influencing Children's Eating Habits

- ▶ **Adult Modelling:** The main factor influencing children's eating habits are the adults around them that model healthy eating and healthy eating practices. When parents don't practice what they preach, they are sending their children mixed messages.
- ▶ Sometimes children view the forbidden foods as more desirable than the foods their parents allow them to eat. This may cause children to eat more of those unwanted foods which has the opposite effect of what the parents' wanted. Instead, parents can try showing their children, through their own actions, how to follow good eating practices and how to balance eating for health and pleasure.



# Factors Influencing Children's Eating Habits

- ▶ Adults should ensure that children are eating regular, healthy meals and snacks.
- ▶ Encouraging their children to choose a variety of foods and to at least try everything on their plate before deciding that they don't like it is important to broadening their taste buds.
- ▶ It is also better for parents to model a healthy attitude with food rather than trying to control what their children eat. At some point and time children will begin to buy their own food and when they do, if they haven't developed these healthy eating habits then they will choose the unhealthy foods that they were never allowed to have as a way to assert control.





# Factors Influencing Children's Eating Habits

- ▶ Parents also shouldn't use food as a reward or punishment. They should also avoid rules such as "you can't have dessert until you finish your dinner" because they are sending the message that dinner is something to suffer through instead of to enjoy.
- ▶ When children become older they will also continue to reward or punish themselves with food which can lead to issues eating disorders such as: anorexia nervosa, bulimia, compulsive overeating.
- ▶ Not learning to control your impulsive eating can also lead to obesity issues.





# Adolescence

- ▶ Next to infancy, the second most rapid growth period of life is adolescence.
- ▶ There are dramatic physical and psychological changes associated with this period and so teenagers have an increased need for almost all the nutrients.
- ▶ If you find yourself always hungry (which you likely do because of this rapid growth period), focus on having healthy snacks such as popcorn with your favourite seasoning, crunchy veggies, fresh fruit, milk and juice.
- ▶ Many teens don't get enough calcium, zinc, iron, Vitamin A, or Vitamin C in their diets.

**The best way to avoid this from happening is to be sure you are following Canada's Food Guide.**



# Adulthood

- ▶ Many people begin to develop a “spare tire” or extra body weight as they enter into adulthood. This very often is because they are eating like they are still teenagers when their body now has a decreased need for calories than it once did.
- ▶ Although adults need less calories, they still need all of their nutrients. In order to get the healthy amount of calories and nutrients adults should eat a variety of low fat, low calorie foods while following Canada’s Food Guide. **Continuing to exercise is also very important.**
- ▶ Unfortunately many adults don’t realize that they have poor eating habits until they develop a health problem. Developing healthy habits during childhood or adolescence can avoid these unhealthy adulthood diseases to start at all.



# Older Adults/Seniors

- ▶ One of the main issues for seniors is that as you age your body's natural "thirst signal" declines and people don't drink as much water as their body needs. Seniors, just like everyone else should drink 8 cups of water daily.
- ▶ Aging Adults have special challenges in meeting their nutritional needs. Many live on fixed incomes (pensions) that are too low to provide enough nutrient-rich food. Those who live alone may dislike preparing a meal for just one or may simply be too frail to cook. Others have health problems that create nutritional risks.
- ▶ In many communities, social service programs are available to help aging adults in situations like these. Senior and community centers often offer meals for older citizens at reduced rates. These programs provide nutrient rich meals as well as an opportunity for socializing.

