



PRENATAL NUTRITION

Session Three

Key Nutrients During Pregnancy

Classes featured: Prenatal Nutrition - Key Nutrients During Pregnancy

OBJECTIVES

- Protein
- Folate
- DHA
- Iron

RESOURCES

- On-the-go ideas
- Mediterranean Diet foods
- Build your own Overnight Oats
- Protein Bite formulas

NOTE

Listed recommended amounts are daily amounts while pregnant; nutrient amounts per food item are average amounts and may vary





KEY NUTRIENT: PROTEIN

PROTEIN'S JOBS IN THE BODY

- Essential nutrient that we need in larger amounts compared to other nutrients
- Building block for our muscles, skin, blood, & cells
- Helps regulate blood sugar levels by slowing down digestion
- Used for postpartum tissue recovery & repair
- Is used to make new cells for growing baby
- Helps develop baby's DNA, organs, joints, & skin

CALCULATE YOUR MINIMUM PROTEIN NEEDS:

1ST TRIMESTER

.88g/kg body weight

Example: 150 lbs. / 2.2 = 68kg

.88 x 68 = 60g protein per day minimum


2ND & 3RD TRIMESTERS

1.1g/kg body weight

Example: 150 lbs. / 2.2 = 68kg

1.1 x 68 = 75g protein per day minimum

MEAT PURCHASING TIPS

- **Organic** means animals have access to the outdoors year-round and their feed was 100% organic (including no antibiotics or hormones)
- Look for the Certified Humane Raised & Handled label on livestock and poultry packaging 
- Look for "**hormone-free**" on beef packaging
- Look for "**antibiotic-free**" on poultry packaging (adding hormones to poultry has been banned since the 1950's, so when you see "no hormones" or "hormone-free" on poultry packaging, it's purely marketing)

Follow these tips if and when you can. When it's not feasible - don't stress about them.



KEY NUTRIENT: DHA

DURING PREGNANCY, DHA HELPS:

- Form baby’s brain cells, nervous system, & eyes
- Protect baby’s brain from inflammation & neuro-developmental damage
- Protect you from maternal anxiety

DOCOSAHEXAENOIC ACID (DHA)

A type of anti-inflammatory fat called an omega-3 fatty acid. Other types of omega-3s are eicosapentaenoic acid (EPA) & alpha-linolenic acid (ALA). Our bodies can’t make them on their own, so we must get them from food and/or supplements.

DHA RECOMMENDED AMOUNT: 300MG PER DAY

salmon, fresh caught, 3 oz	1020mg
salmon, canned, 3 oz	600mg
tuna, 3 oz	200mg
halibut, 3 oz	300-400mg
sardines, 3 oz	700mg
grass-fed beef, 3 oz	100mg
egg, 1 whole	29mg
algae oil supplement	amount varies

FATTY ACIDS

Consuming enough omega-3 fatty acids while pregnant is associated with:

- less depression in mom
- improved neurocognitive outcomes in children
- reduced allergies & asthma in children
- a decrease in preterm birth

IMPORTANT!

Make sure your prenatal supplement has DHA in it.

Vegan or Vegetarian?

Getting DHA from a supplement is extra important for you. Take fish-based supplement if tolerated/aligns with your preference. If fish is a complete “no” for you, find an algae-based DHA supplement.



KEY NUTRIENT: FOLATE

WHAT IT IS

Folate is vitamin B9. It's one of the **most important nutrients during pregnancy** because it's crucial for fetal development throughout your whole pregnancy & **especially** in the early stages, when many women do not realize they are pregnant!

DID YOU KNOW?

Folic acid is the synthetic form of folate, found in supplements. Make sure your prenatal supplement includes folic acid.



FOLATE

Recommended Amount: 600mcg per day

Beef liver, 3 oz	215mcg
Spinach, boiled, 1/2 cup	131mcg
Cowpeas, boiled, 1/2 cup	105mcg
Rice, white, 1/2 cup	90mcg
Asparagus, 4 spears	89mcg
Brussels sprouts, 1/2 cup	78mcg
Lettuce, 1 cup	64mcg
Avocado, 1/2 cup	59mcg
Spinach, raw, 1/2 cup	58mcg
Mustard greens, 1/2 cup	52mcg
Green peas, 1/2 cup	47mcg
Kidney beans, 1/2 cup	46mcg
Wheat germ, 2 Tbsp.	40mcg
Turnip greens, 1/2 cup	32mcg
Peanuts, 1 oz	27mcg
Orange, 1 small	29mcg
Papaya, 1/2 cup	27mcg
Banana, 1 medium	24mcg
Baker's yeast, 1/4 tsp.	23mcg
Egg, 1 large	22mcg
Cantaloupe, 1/2 cup	17mcg
Baked beans, 1/2 cup	15mcg
Fish, 3 oz	12mcg
Ground beef, lean, 3 oz	7mcg
Chicken breast, 3 oz	3mcg



KEY NUTRIENT: IRON

IRON

Recommended Amount: 27mg per day

organ meats (liver), 3 oz	5-10mg
tofu, 3 oz	6.6mg
soybeans, 1/2 cup	4.4mg
white beans, 1/2 cup	4mg
lentils, 1/2 cup	3.3mg
spinach, 1/2 cup	3.2mg
beef roast, 3 oz	2.7mg
kidney beans, 1/2 cup	2.6mg
sardines, 3 oz	2.5mg
pumpkin seeds, 1/4 cup	2mg

IRON + CALCIUM

Amount: 1000mg per day

Calcium **competes** with the absorption of iron in your body, so **avoid** eating calcium sources at the same time as iron sources.

cheddar cheese, 1.5 oz	300mg
plain yogurt, 8oz	460mg
Greek yogurt, 8 oz	255mg
cottage cheese, 1 cup	156mg
milk, 1 cup	300mg
sardines, 3 oz	325mg
salmon, 3 oz	181mg
tofu, 1/2 cup	434mg
white beans, 1/2 cup	81mg
spinach, 1 cup	245mg
kale, 1 cup	94mg
collard greens, 1 cup	198mg
broccoli, 1 cup	86mg
Bok choy, 1 cup	185mg
amaranth, 1/2 cup cooked	58mg

IRON + VITAMIN C

Amount: 85mg per day

Dynamic Duo:

Eating vitamin C at the same time as iron **enhances** the absorption of iron, so try to eat vitamin C sources along with iron sources.

red bell pepper, 1/2 cup	95mg
orange, medium size	70mg
kiwi fruit	64mg
green bell pepper, 1/2 cup	60mg
broccoli, cooked, 1/2 cup	51mg
strawberries, 1/2 cup	49mg
Brussels sprouts, 1/2 cup	48mg
tomato juice, 3/4 cup	33mg
potato, baked	17mg

IRON + VITAMIN C COMBOS:

- ground meat + tomato sauce orange juice + iron-rich meal
- stir-fry with bell peppers + beef/tofu citrus fruit in marinade
- beans + salsa
- broccoli + tofu
- lentils + tomatoes or tomato sauce

On-the-Go Ideas

PACK A MINI COOLER

Yogurt Parfait

- plain dairy-free yogurt + fresh/frozen berries + cinnamon + nuts + seeds
- Mix the night before in your own container to avoid on-the-go mess
- Use container with tight-fitting lid and that is big enough to not spill over the sides when you stir

Stuffed Tortilla Wrap

- tortilla or wrap hummus, guacamole, pesto, or other spread
- thinly sliced & washed carrots, zucchini, peppers
- rotisserie chicken
- washed greens
- fresh, washed herbs

Mason Jar Salad

- fill mason jar with greens, veggies, &
- protein of choice
- bring dressing to add securely close jar & shake to mix right before eating

MAKE YOUR OWN TRAIL-MIX:

- Buy nuts from bulk section at grocery store
- Combine walnuts + almonds + cashews
- If unsalted, you can add a little avocado oil + salt yourself
- Pair with ANY fresh fruit

NEED A FAST-FOOD OPTION?

Try the grocery store hot or salad bar. It's probably faster than waiting in a drive-thru!

Hot Bar

- roasted veggies
- potatoes
- rice, quinoa
- baked poultry, fish, or beef

Taco Bar

- make a taco salad with the shredded meat + all cooked ingredients
- make a burrito bowl with rice, beans, meat, cooked veggies & guacamole

Salad Bar

- avoid fresh melon
- ready-to-eat poultry or fish beans, lentils, sunflower & pumpkin seeds, slivered almonds dressing: olive oil + balsamic vinegar are better-for-you choices due to pro-inflammatory oils used in most convenient salad dressings
- **CAUTION:** Be careful with pre-packaged salads, as they often include deli meats



Foods of the Mediterranean Diet

Vegetables & Tubers

artichokes
arugula
beets broccoli
brussel sprouts
carrots
celery
celeriac
chicory
collard cucumber
dandelion greens
eggplant
fennel
kale
leeks
lettuce
mushrooms
greens
okra
onions
peas
peppers
potatoes
radishes
rutabaga
scallions
shallots
spinach
turnips
zucchini

Cheese & Yogurt

brie
chèvre
feta
halloumi
manchego
parmigiano-reggano
pecorino
ricotta
greek yogurt

Fruits

avocados
apples
apricots
cherries
clementines
dates
figs
grapefruits
grapes
lemons
melons
nectarines
olives
oranges
peaches
pears
pomegranates
pumpkins
strawberries
tangerines
tomatoes

Grains

bread
barley
buckwheat
bulgur
couscous
durum
farro
millet
oats
polenta
rice
wheat berries

Sweets

treats made with:
nuts
fruits
whole grains
minimal sugars

Fish & Seafood

clams
crab
lobster
mackerel
mussels
octopus
oysters
salmon
sardines
sea bass
shrimp
quid
tilapia
tuna
yellowtail

Meats

beef
goat
lamb
pork

Poultry & Eggs

chicken
duck
quail
eggs

Nuts, Seeds, Legumes

almonds
beans
cashews
hazelnuts
lentils
pine nuts
pistachios
sesame seeds
split peas
walnuts

Herbs & Spices

anise
basil
bay leaf
cinnamon
chiles
clove
cumin
fennel
garlic
lavender
majoram
mint
oregano
parsley
pepper
rosemary
sage
tarragon
thyme
za'atar

Growing evidence suggests

Higher adherence to eating a Mediterranean Diet pattern while pregnant is associated with a cardioprotective effect for mom and reduced negative outcomes for baby, such as reduced risk of spina bifida.

Build Your Own Overnight Oats

Add the oats, nut milk and chia seeds to a jar or container with a lid. Then, choose from the additional add ins and make it your own.

OATS



1/2 cup oats

+

NUT MILK



1/2 cup-1 cup unsweetened nut milk of your choice (enough to cover the oats)

+

CHIA SEEDS



1-2 Tbs chia seeds

Add to a jar or container with a lid, shake to combine and set in the fridge overnight. Add a scoop of your favorite protein powder for additional protein.

ADD INS

- 1/2 cup berries of your choice
- 1 tsp of agave, honey or maple syrup
- 2 Tbsp nut butter of your choice

FOR EXTRA FLAVOR

- nutmeg
- cinnamon
- cacao powder
- clove
- ginger
- vanilla extract
- unsweetened coconut
- instant coffee
- dash of salt

NUT MILK TIP:

When shopping, pay attention to the nutrition label. Make sure there is no added sugar. Ingredients should only read: Almonds, Water.

Basically, just make sure there's no added junk! Limit ingredients you can't pronounce or don't recognize.

Brands we like: MALK, Califia Farms, Thrive Market Brand

Protein Bites Formula

Choose your favorite 1-2 from each category.
Try new combinations to create new flavors!

HEALTHY BASE



oats



ground flaxseed



protein powder

+

STICK + SWEET



ground dates



nut butter



honey

+

EXTRA FLAVOR



shredded coconut



almonds/nuts



mini choc chips



raisins



extracts - vanilla,
peppermint, almond



cacao powder

WE RECOMMEND

1/2 cup healthy base, 1-2 tbs stick+sweet, and extra flavors to taste.

- Combine in a bowl until mixed, roll into balls and store in the fridge or the freezer.
- Other fun add-in ideas: cinnamon, nutmeg, any spices, hemp seeds, fruit or dried fruit.