

Congratulations on your pregnancy! We are honored to be caring for you on this journey of building your family. In this packet you will find general practice information, an outline of your obstetrical care, review of the laboratory testing done throughout the pregnancy, review of medications you can take, common pregnancy questions and a list of links to useful websites.

### Introduction:

We are a group of board certified obstetrician/gynecologists working together to care for you: Dr. Ami Acharya, Dr. Maria Asis, Dr. Kristen Aversa, Dr. Sean Flaherty, Dr. Craig Huttler, Dr. Beth Maloy and Dr. Nina Rivera. During your prenatal care, you will rotate through our team.

### Our office locations:

Hamden	2446 Whitney Avenue	203-248-4461
Wallingford	850 North Main Street Extension	203-294-1003
Guilford	5 Durham Road	203 453-4766
New Haven	46 Prince Street*	203-562-6741

\*If using a GPS, use 2 Amistad St to reach the parking lot - Parking fee: \$3.00

Ultrasound services provided in our Hamden office location. We aim to keep your office visits convenient for you with regard to time and location. There may be times when your first preference of time or office location is unavailable and thank you for your understanding. The providers rotate through all the offices. We utilize the electronic medical record, EPIC, making your record accessible in all the offices and in the hospital. We deliver at Yale New Haven Hospital - 20 York St.

### **Contact information:**

During **regular hours**, you can call any of the numbers above. There is a dedicated line for obstetrical patients with an issue or those in labor. **To reach, press 0**.

Offices hours are Monday - Thursday 8:30a -5p and Friday 8:30a to 3p.

After hours, our phone lines are connected to an answering service. If you call and do not get a call back in 20 minutes, please call again to page the on call provider.

We encourage you to utilize **MyChart**, the patient portal to the Epic EMR at <u>mychart.ynhhs.org</u> Please see the enclosed information to sign up.

MyChart can be utilized to review lab work or ask general questions BUT should not be utilized for any concerns related to your health. Please always CALL the office for any ISSUES such as: bleeding, unusual pain or discharge, urinary tract infection symptoms, contractions or decreased fetal movement.



## **Outline of Care**

## Schedule of Routine Visits, Lab Tests and Ultrasounds:

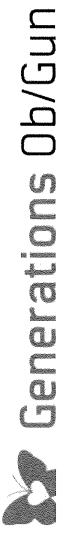
8 – 10 weeks	initial visit, dating ultrasound, baseline bloodwork, Recessive Gene Carrier Testing ordered
10 – 12 weeks	fetal/maternal check, review of lab tests, Cell Free DNA testing ordered, to be done at 11 – 12 weeks at Yale Lab
16 weeks	fetal/maternal check, AFP testing ordered – to be done at 16 – 18 weeks
18 – 20 weeks	fetal/maternal check, Anatomy ultrasound
24 – 26 weeks	fetal/maternal check, 1 hour glucose test, CBC, VDRL ordered – to be done at 26 – 28 weeks
28 weeks	fetal/maternal check, TDAP, Rhogam, if indicated
20 WCCR3	retay maternar enests, 1514, 1416 gam, 11 maiotica
30 weeks	fetal/maternal check
30 weeks	fetal/maternal check
30 weeks 32 weeks	fetal/maternal check fetal/maternal check
30 weeks 32 weeks 34 weeks	fetal/maternal check fetal/maternal check fetal/maternal check

Common Laboratory Tests in Pregnancy

Gestational	Gestational Test   Preparation	Preparation	Cut Off	Understanding Results
Age			Values	
8 - 10	CBC	None	iter	screen for anemia in pregnancy
Weeks				
	Blood Type	None		if RH negative will need rhogam to prevent immune response to possible exposure to fetal
	& Rh			rh+ blood, normally administered at 28 weeks, sooner if bleeding occurs
	Hepatitis	None	Negative	if positive, steps taken to prevent transmission to baby
	Syphilis	None	Negative	if positive, steps taken to treat mother and clear infection
	NIH	None	Negative	if positive, steps taken to treat mother and prevent transmission to baby
	Urine Culture	None	>10,000	depending on type of bacteria, may be treated if asymptomatic to avoid kidney infection
	Carrier Gene	Optional	Negative	ACOG recommends cystic fibrosis, Fragile X, spinal muscularatrophy/hemoglobinopathy.
	Testing	Performed		Alternatively, a universal screen can be ordered, screening for 126 conditions. The more
		at Yale		conditions screened, the greater likelihood one will come back positive. The partner is then
		Check		tested for that gene. It is ONLY if mother AND partner carry the SAME recessive gene that
		coverage		there is a 1 in 4 chance of the fetus having a clinical disease.
		with		
		insurance		
		company		
	Varicella		lgG >165	May be marked in red as positive when it is a marker of past infection. No concern
	Toxoplasmosis	lf cat	lgG Positive	May be marked in red as positive when it is a marker of past infection. No concern
		at home	or >1.1	
	Parvovirus	If works in	lgG Positive	May be marked in red as positive when it is a marker of past infection. No concern
		school or	or >1.1	
		daycare		
11 - 12	Cell Free DNA	Optional	Trisomy 21, 18	replaces first trimester screen and amniocentesis
weeks		Performed	Monosomy X	
		at Yale	Microdeletions	
		Check	Gender of Baby	
·		coverage		
		with		
		insurance		
		company		

Common Laboratory Tests in Pregnancy

Gestational	Gestational Test   Prenarati	Prenaration	Cut Off	Understanding Results
Age			Values	
16 - 18	AFP	None	2.0 Yale	screening for anatomical anomalies (spinabifida); marker for placental issues.
weeks			2.5 Quest	If positive, screening ultrasound done with MFM at Yale. Repeat ultrasound at 32 weeks
26 - 28	CBC	None	>32.2	some dilutional anemia expected. If below 32, iron supplementation advised
weeks				
	Glucose	1 hour	<130	screening test for gestational diabetes. If >130, 3 hour Glucose Tolerance done
	Tolerance	at Lab		
	3 Hour	FASTING	105/190	if 2 or more numbers are at or above the cut offs, the diagnosis of gestational diabetes
	Glucose	drink 100g	165/140	is made
	Tolerance	glucose		
		blood drawn		
		at 1 hr		
		intervals		
		additional 3		
		poold		
		draws at		
		hourly		
		intervals		
	F	None	as above	required by the State
	Palladium AB			
36	Group B	Office	Positive or	30% are positive. Antibiotics are given during labor to help prevent neonatal infection.
weeks	Strep	Procedure	Negative	If water breaks before labor, protocol is induction along with antibiotics.





# **Vaccinations in Pregnancy**

TDAP Vaccine (Tetanus toxoid, reduced diphtheria toxoid and acellular pertussis)

Whooping cough (pertussis) is a highly contagious respiratory illness that can cause complicated pneumonia and inability to breath. Babies are especially vulnerable to whooping cough. While there is a vaccination to prevent this disease, vaccination schedules do not start until 2 months of age.

Offering the TDAP vaccine between 27 and 36 weeks of pregnancy allows the mother to build immunity and transfer immunity to the baby. In doing so, the baby has protection until its own vaccine schedule starts.

Vaccinating close contacts is recommended if they had not had the TDAP vaccine previously.

Side effects are minor, if at all. They can occur within 1-3 days: soreness at site of injection, redness, body aches, headaches, mild fever, nausea, chills, fatigue.

### Influenza vaccine

Flu is an acute respiratory illness caused by the influenza virus A and B. Pregnant women are at higher risk of having complications, which in turn, affects the outcome of the pregnancy. For example, pregnant patients with the flu who need critical care support have higher risk of miscarriages, preterm deliveries and growth restricted babies.

The Flu vaccine can be given during any trimester. Generally, it is administered between October and March.

Family members are also encouraged to receive the vaccine.

Side effects include headache, muscle ache, low grade fever.

It is important to note that these vaccines do not contain mercury. They do not cause birth defects or autism.



## **Medications Safe to Take in Pregnancy**

Allergies: Claritin, Zyrtec, Benadryl

Common Cold: Tylenol cold and sinus, Robitussin, Mucinex

Constipation: Miralax, Metamucil, Citrucel, Colace, Dulcolax, Milk of Magnesia

Gas: Gas-X, Mylicon

Headache/Fever: Acetaminophen (Tylenol 650mg up to 4 x day).

DO NOT TAKE IBUPROFEN (Motrin or Advil) or NAPROXEN SODIUM (Aleve)

Heartburn: Tums, Pepcid

Hemorrhoids: Tucks, Preparation H, Anusol HC

Insomnia: Unisom, Tylenol PM, Benadryl

Nasal congestion: Saline nasal spray, Sudafed, if normal blood pressure

Nausea/Vomiting: B6 - 50mg with Unisom

Yeast: Monistat, Gynelotrimin



## **Nutrition and Food Guidelines**

## 1. How much weight should I gain?

ACOG guidelines recommend different weight gain tiers based on pre-pregnancy BMI (body mass index) calculated with a formula adjusting for your height and weight.

BMI <18.5 28-40 lb</li>
 BMI 18.5 - 24.9 25-35 lbs
 BMI 25 - 30.9 15-20 lbs
 BMI >31 11-20 lbs

### 2. How do I make sure I am eating correctly?

Overall calorie intake increases by a small amount: 350 - 450/day. The USDA recommends at least 175 grams of carbohydrates, 71 grams of protein, and 20 - 35% of total calories coming from good fats. Rather than following strict numbers, eating a healthy diet with low fat sources of protein, complex carbohydrates, fruits, vegetables, and healthy fats will lay the foundation for a healthy pregnancy.

Resources: <u>Nutrition During Pregnancy</u> https://chosemyplate.gov

## 3. What are the recommended vitamins and minerals?

While prenatal vitamins supply beyond the basic recommendations, the essential components are:

Folic acid
 400 mcg - 1000 mcg

Calcium 1000 mg
Vitamin D 600 iu
Iron 27 mg

DHA 200 - 300 mg

### 4. Are there foods I should limit?

CAFFEINE: limit to 300 mg per day.

home brewed coffee 8 oz 130 mg tea/soda 8 oz 50 mg Starbucks (tall) 12 oz 260 mg Dunkin' 10 oz 150 mg

**FISH:** ACOG recommends 2- 3 servings per week of fish with high DHA and low mercury content, 8-12 oz in TOTAL. ACOG advises against too much fish intake and those fish with high mercury levels.



Resource: https://www.fda.gov/food/consumers/advice-about-eating-fish

### 5. Are there foods I should avoid?

YES: due to the concern of Toxoplasmosis and Listeria, which are infections that can affect development of the fetus. While Toxoplasmosis is generally thought of being transmitted through kitten feces, it is contamination of the soil that can lead to infection from unwashed fruits and vegetables. Listeria is generally thought of being transmitted through deli meats; outbreaks can occur from other meats/vegetables.

#### Foods to avoid:

- RAW or undercooked meat
- Unpasteurized products
- Unheated deli meats
- Unwashed vegetables.
- Raw sprouts
- Cut melon left at room temperature.

Resources:Listeria and Pregnancy

CDC - Toxoplasmosis - General Information - Pregnant Women

Alcohol, tobacco and Marijuana smoking are not recommended while you are pregnant. If you do smoke, or have concern of alcohol and or substance abuse, we can help. Please reach out.



# **Exercise in Pregnancy**

We are learning more and more how important exercise is in pregnancy. It can decrease your chances of gestational diabetes and preeclampsia

ACOG recommends 30 minutes of exercise a day. There are a few pregnancy complications, like placenta previa or cervical insufficiency, they may require less/no exercise but these conditions are rare.

There is no limit on heart rate anymore, but you should be able to talk during your workout. Examples of exercise: walking, stationary cycling, aerobics, dancing, resistance training, stretching. It is a good idea to strengthen back and abdominal muscles to help prevent back pain later in pregnancy. After 20 weeks it may be beneficial to avoid lying on your back for a prolonged time to avoid hypotension and dizziness. It is important to stay hydrated. Please stop exercising if you develop bleeding, abdominal pain, contractions, leaking of fluid, chest pain, muscle weakness affecting balance, calf pain, or swelling.

Table 3. Characteristics of a Safe and Effective Exercise Regimen in Pregnancy

When to Start	First Trimester, More Than 12 Weeks of gestation			
Duration of a session	30–60 minutes			
Times per week	At least 3-4 (up to daily)			
Intensity of exercise	Less than 60-80% of age-predicted maximum maternal heart rate*			
Environment	Thermoneutral or controlled conditions (air conditioning; avoiding prolonged exposure to heat)			
Self-reported intensity of exercise (Borg scale)	Moderate intensity (12-14 on Borg scale)			
Supervision of exercise	Preferred, if available			
When to end	Until delivery (as tolerated)			

<sup>\*</sup>Usually not exceeding 140 beats per minute.

Modified from Berghella V, Saccone G. Exercise in pregnancy! Am J Obstet Gynecol 2017;216:335-7.

Resource: https://www.acog.org/patient-resources/faqs/pregnancy/exercise-during-pregnancy



## **Common Questions**

### 1. Is it safe to travel while pregnant?

Yes, air travel during an uncomplicated pregnancy is generally safe. Most airlines allow pregnant women to fly up to 36 weeks. The safest time to fly is between 13 and 26 weeks as the most common obstetrical emergencies occur in the first and third trimesters. There is no concern for radiation exposure. There is theoretical concern for increased risk of blood clots. Recommendations from the American College of Obstetrics and Gynecology are to wear loose clothing and to avoid gassy foods that can create abdominal discomfort. On the flight, ACOG recommends moving periodically, wearing a seatbelt and hydrating well.

### 2. Is it safe to use insect repellent?

Yes, it is safe to use insect repellent including DEET. They are not associated with birth defects

### 3. When can I dye my hair?

There is no clear cut study, but in general, hair dyes result in minimal systemic absorption and can be considered safe throughout pregnancy. Waiting until after 12 weeks provides extra reassurance.

### 4. Can I go to the dentist?

Yes, routine dental procedures should continue: cleanings, extractions, root canals, x-rays with shielding, lidocaine with and without epinephrine can be used. Cavities can be filled with amalgam or composite material.

### 5. Can I sleep on my back?

Interestingly, for such a common question, studies have been lacking. There is a recent study that demonstrated falling asleep on your back until 30 weeks causes no harm. Theoretically there is a concern that as the uterus enlarges beyond that, it can obstruct blood flow to your upper body and the baby. For that reason it is better to try to sleep on your side during the third trimester. All said, waking up on your back should not cause concern.

### 6. Can I use a hot tub?

Yes, after the first trimester is safest. The concern is that the water temperature could elevate your internal temperature and affect the baby's development. Hot tub soaks should be limited to 10 minutes with chest and arms above water level; saunas should be limited to 15 minutes.

### 7. Can I have sexual intercourse?

Yes, as long as your pregnancy remains low risk. Your provider will tell you if a pregnancy complication requires you to abstain. Minimal vaginal spotting can occur following intercourse and is from the cervix externally.



### FETAL MOVEMENT - KICK COUNTS

### What are Kick Counts?

The occurrence of frequent baby movements during pregnancy is an excellent indicator of fetal well-being. The first fetal movements or "flutters" are usually felt by the mother between the 16th and the 20th week of pregnancy. Movements generally increase in strength and frequency through pregnancy, particularly at night, and when the woman is at rest. At the end of pregnancy (36 weeks and beyond), there is normally a slow change in movements, with fewer forceful kicks and more rolling and stretching movements.

A Kick Count is the maternal counting and tracking of fetal movement. Medical research supports kick count as a simple, valuable, effective, reliable and harmless screening of fetal well-being during the third trimester in both low- and high-risk pregnancies.

A Kick Count is fetal movement counting which includes kicks, turns, twists, swishes, rolls, and jabs but not hiccups. Significant decrease in the fetal movement pattern may help identify potential problems with your pregnancy that may need further evaluation.

Setting aside time to count the kicks allows you time to rest and bond with your baby. Even when the baby is always active, daily counting will allow you to notice the significant difference in the Kick Count pattern.

#### How do I do Kick Counts?

- You can do the Kick Count <u>once a day after 32 weeks</u>. Use the attached Baby Kick Count Chart to record your findings.
- Select a time of the day best suited for you when your baby is usually active. For most women, fetal movement typically peaks after meals, after activity, and in the evening.
- Do the Kick Count roughly at the same time every day.
- Get in a comfortable sitting or lying position. Relax and dedicate this time to feeling your baby's precious movements.
- You may want to rest your or your partner's hands on your abdomen to feel the movements better. Your
  ability to feel the baby depends on the thickness of your abdominal wall, placental location, and your
  sensitivity to the movements.
- Jot down the time of the baby's first kick (movement) and the time of the 10th kick. Most of the babies will take less than 30 minutes to complete 10 kicks. You may also mark this on the Baby Kick Count chart.
- The American College of Obstetricians and Gynecologists (ACOG) recommends that you note the time it takes to feel 10 kicks, twists, turns, swishes, or rolls. A healthy baby should have 10 kicks in less than 2 hours. Most babies will take less than 30 minutes.
- Since healthy babies have sleep cycles, your baby may not kick, or kick less than usual, or have less than 10 kicks in 2 hours. If so, wake up the baby by drinking fluid or by walking for 5 minutes. Repeat the Kick Count.
- · Contact the office if there is still decreased fetal movement.
- Do not wait for 24 hours when there is no fetal movement or significant changes in the movements. When in doubt, always contact the office at 203-248-4461.

## **BABY KICK COUNT CHART**

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I am in week of my p	regnancy						
Day & Data	Constant	Monday	Tuesday	Wednesday	Thursday	Friday	Cotouder
<u>Day &amp; Date</u> Start Time	Sunday	ivionuay	<u>ruesuay</u>	wednesday	<u>Inursuay</u>	rriday	<u>Saturday</u>
Stop Time		<u> </u>					
Minutes to reach 10							
iviliates to reach to				<u> </u>			
I am in week of my p	regnancy						
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Stop Time							
Minutes to reach 10				]			· ·
I am in week of my p	regnancy				<u> </u>	<del>ilinidada.</del>	
							<del>                                     </del>
Day & Date	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
Start Time					-		
Stop Time							
Minutes to reach 10							



## **Useful Links:**

**Nutrition During Pregnancy** 

Choosemyplate.gov

https://www.fda.gov/food/FoodbornellInessContaminants/Metals/ucm393070.htmwww.CDC.gov/Listeria and Pregnancy

CDC - Toxoplasmosis - General Information - Pregnant Womenwww.otispregnancy.org

www.cdc.gov/pregnancy/meds/treatingfortwo/index.htmlhttps://www.acog.org/patient-resources/faqs/pregnancy/exercise-during-pregnancy

https://www.acog.org/patient-resources/faqs/pregnancy/how-your-fetus-grows

https://www.acog.org/patient-resources/faqs/pregnancy/morning-sickness-nausea-and-vomiting-of-pregnancyduring-pregnancy

https://www.acog.org/patient-resources/faqs/pregnancy/back-pain-during-pregnancy

https://www.acog.org/patient-resources/faqs/pregnancy/travel-during-pregnancy

https://www.acog.org/patient-resources/faqs/pregnancy/skin-conditions-during-pregnancy

https://www.acog.org/patient-resources/faqs/pregnancy/a-partners-guide-to-pregnancy

https://www.mychart.com/LoginSignup