



**International Federation of Gynecology and Obstetrics**

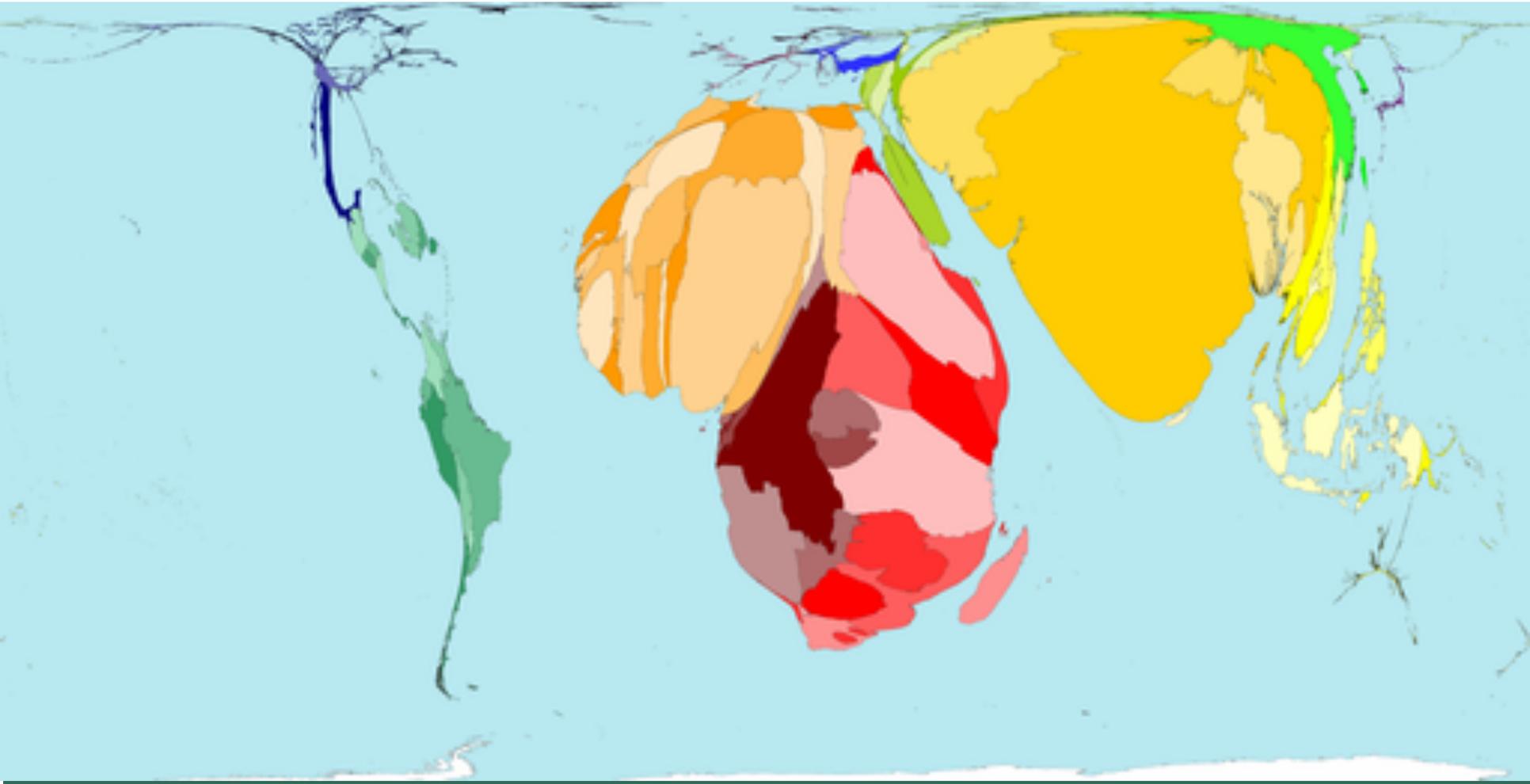


# FIGO Mission

- The International Federation of Gynecology and Obstetrics (FIGO) is a unique organization, being the only international professional body that brings together **130 obstetrical and gynecological associations** from all over the world.
- FIGO is dedicated to the improvement of women's health and rights and to the reduction of disparities in health care available to women and newborns **as well as to advancing the science and practice of obstetrics and gynecology**. The organization pursues its mission through advocacy, programmatic activities, capacity strengthening of member associations and **education and training**.

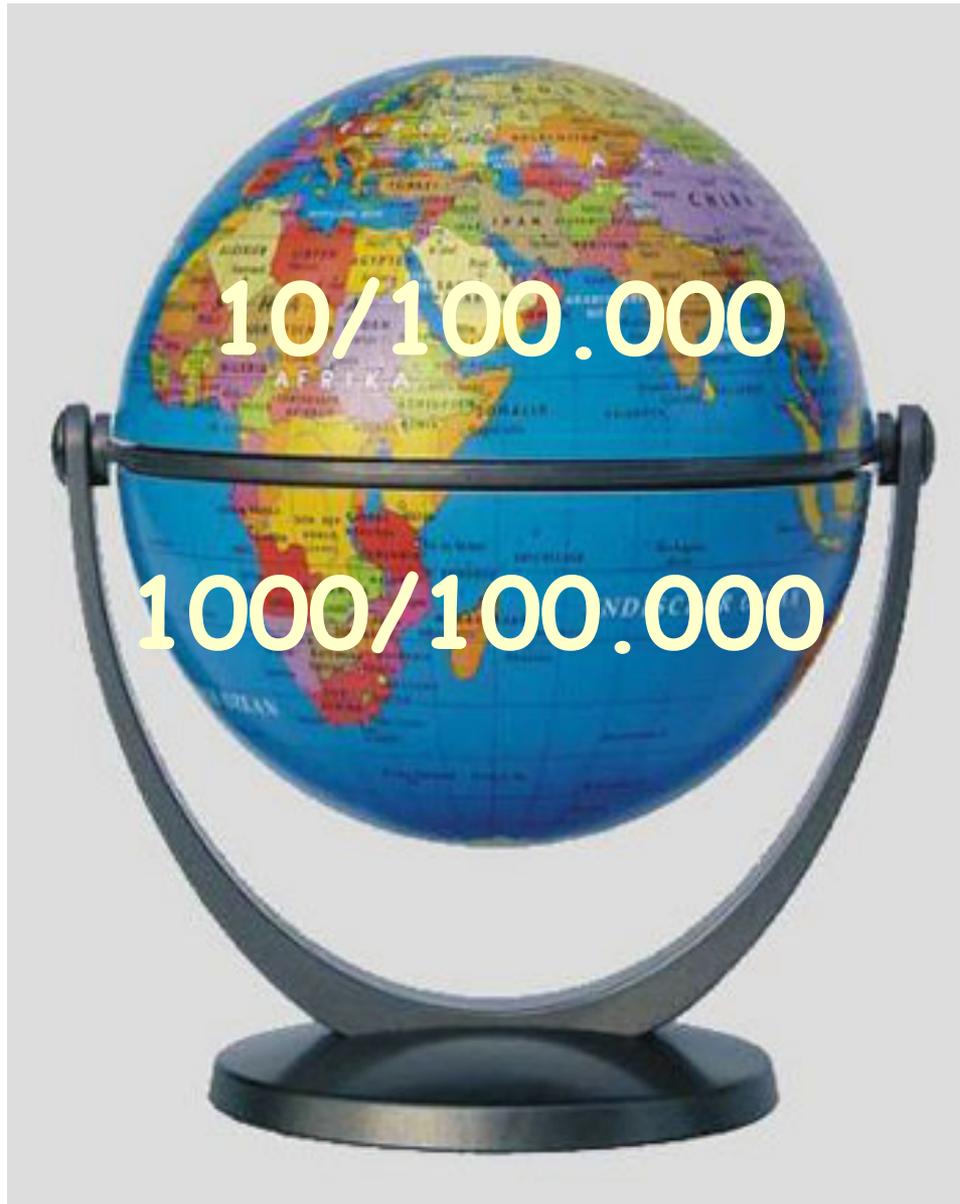


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INEQUITIES



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*International Federation of Gynecology and Obstetrics  
Working Group on Good Clinical Practice in Maternal-Fetal Medicine*

**Chair: G C Di Renzo**

**Expert members:**

**E Fonseca, Brasil**

**E Gratacos, Spain**

**S Hassan, USA**

**M Kurtser, Russia**

**F Malone, Ireland**

**S Nambiar, Malaysia**

**M Sierra, Mexico**

**K Nicolaides, UK**

**H Yang, China**

**Expert members ex officio:**

**C Fuchtner, FIGO**

**M Hod, EAPM**

**GH Visser, SM Committee**

**E Castelazo , CBET Committee**

**L Cabero, WG GDM**

**V Berghella, SMFM**

**Y Ville, ISUOG**

**M Hanson, DOHaD, WG Nutrition**

**PP Mastroiacovo, Clearinghouse**

**JL Simpson, March of Dimes**

**D Bloomer, GLOWM**



*International Federation of Gynecology and Obstetrics  
Working Group on the Challenges of Labour and Delivery*

**Chair: R Romero**

**Expert members:**

**D Farine, Canada**

**MT Gervasi, Italy**

**J M. Robson, Ireland**

**T Duan, China**

**S Rosales, Mexico**

**T Kimura, Japan**

**L Yeo, Korea-USA**

**Expert members ex officio:**

**C N Purandare, FIGO**

**G C Di Renzo, FIGO**

**M Stark, NESAs**

**GH Visser, SM Committee**

**E Castelazo , CBET Committee**

**C Lees, RCOG**

**A Conde' Agudelo, NIH NICHD**

**D Bloomer, GLOWM**



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*International Federation of Gynecology and Obstetrics  
March of Dimes  
Working Group on Preterm Birth Prevention*

**Chairs: J L Simpson  
G C Di Renzo  
Expert members:  
Ernesto Castelazo  
Mary D'Alton  
Eduardo Fonseca  
Chris Howson  
Bo Jacobsson  
James Martin  
Jane Norman  
T Y Leung**

**Expert members ex officio:  
CN Purandare, FIGO  
J Howse, March of Dimes  
G Visser, SM Committee  
D Bloomer, GLOWM  
Jim Larson BCG  
David Ferrero, BCG**



**FIGO**



**International  
Diabetes  
Federation**

*International Federation of Gynecology and Obstetrics  
GDM initiative*

**Chair: M Hod**

**Expert members:**

**Mukesh Agarwal**

**Blami Dao**

**Gian Carlo Di Renzo**

**Hema Divakar**

**Eran Hadar**

**Anil Kapur**

**Expert members ex officio:**

**CN Purandare, FIGO**

**GH Visser, SM Committee**

**D Ayres do Campo, SM Comm**

**L Cabero, CBET Committee**

**D Bloomer, GLOWM**

**R Fabienke, Novo Nordisk**



# Good practice advice

- *Folic acid supplementation*
- *Prediction and prevention of preterm birth*
- *Non invasive prenatal diagnosis and testing*



# Good practice advice

- *Thyroid diseases in pregnancy*
- *MgSO<sub>4</sub> use in obstetrics*
- *Appropriate use of ultrasound in pregnancy*
- *Hyperglycemia and pregnancy*



# Good practice advice

finalised in June 2016

- *Aspirin Use in Pregnancy*
- *Iron deficiency anaemia*
- *Management of Twin Pregnancy*
- *Micronutrients in Pregnancy*



# Good practice advice

to be discussed on December 2016

- *Intrauterine growth restriction*
- *Recurrent Miscarriage*
- *Prediction of pre eclampsia*

# Thyroid Gland

**One of the largest endocrine gland**

**2 inch long, Butterfly shaped gland**

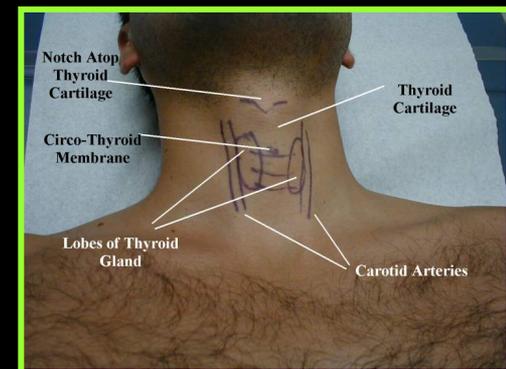
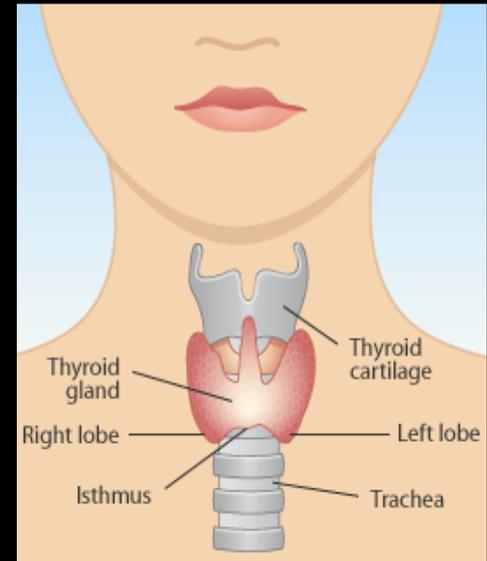
**Located front of the neck, below the larynx**

**It has two lobes (Right & Left)**

**Average weight 25-30g in adults (slightly more in women)**

**The thyroid makes two thyroid hormones**

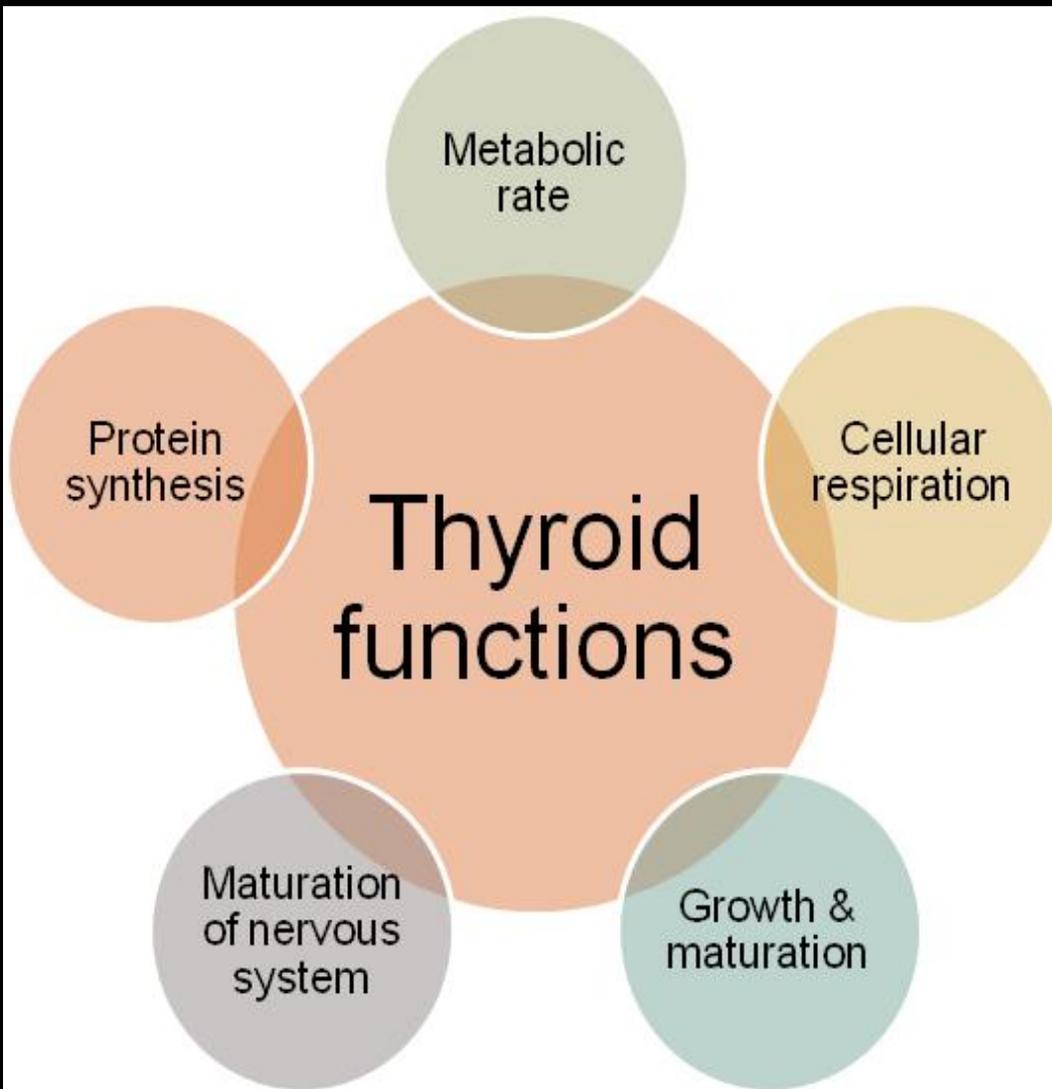
- **Thyroxine (T4)**
- **Triiodothyronine (T3)**



**One of the largest endocrine gland**  
**The thyroid makes two thyroid hormones**

- **Thyroxine (T4)**
- **Triiodothyronine (T3)**

## **Thyroid Gland Functions**



**MOST OF FUNCTION DUE TO T3**

Growth & development

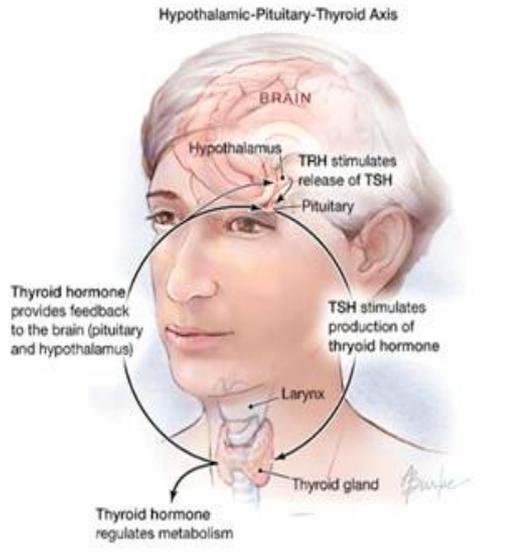
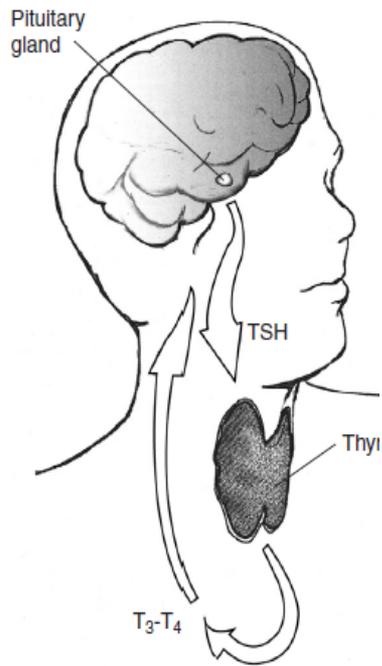
Increasing rate of metabolism

Increase metabolic rate in CVS → blood flow

Regulating cerebral conduction in CNS

Sleep

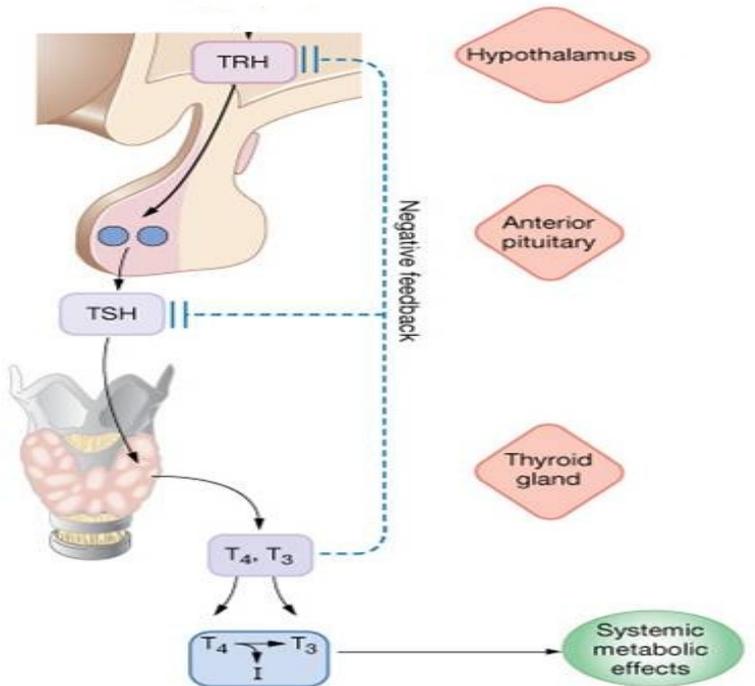
Lipid metabolism



**Points to be remembered....**

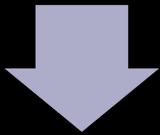
**When thyroid hormone levels in the blood are low, the pituitary releases more TSH.**  
 (↓ T<sub>4</sub> & T<sub>3</sub> --- ↑ TSH)

**When thyroid hormone (T<sub>4</sub>, T<sub>3</sub>) levels are high, the pituitary decreases TSH production.**  
 (↑ T<sub>4</sub> & T<sub>3</sub> --- ↓ TSH)

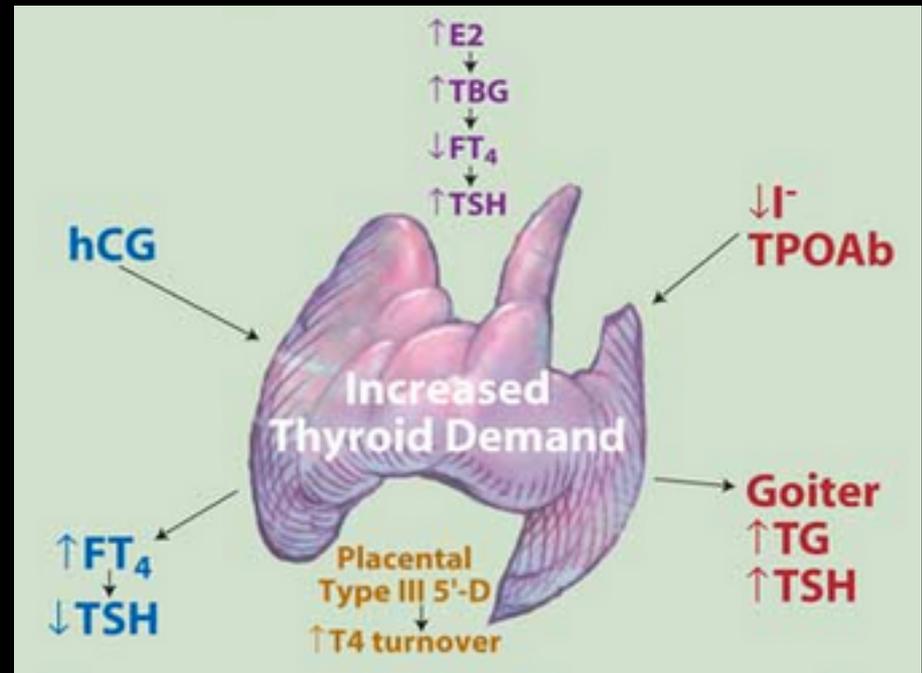


**Increased TSH levels indicates.... Pituitary gland working extra hard to maintain normal circulating thyroid hormones !**

Early  
Pregnancy



Serum  
Thyrotropin  
level decreases



Weak TSH effect of HCG  
‘Spill over’  
Increase in free Thyroxine



**TSH: decreases in first trimester**



**TSH increases in second  
& third trimester**

**TT3 & TT4 : rise in preg  
FT3 & FT4 : less altered**

# The Nine Square Game

To evaluate our Thyroid patient

As per the AACE and ITS Guidelines

# BASIC THYROID EVALUATION

FREE THYROXINE or FT4

LOW NORMAL HIGH


LOW

NORMAL

HIGH

THYROID STIMULATING HORMONE - TSH

# BASIC THYROID EVALUATION

FREE THYROXINE or FT4	HIGH			
	NORMAL		EUTHYROID	
	LOW			
		LOW	NORMAL	HIGH
		THYROID STIMULATING HORMONE - TSH		

# BASIC THYROID EVALUATION

FREE THYROXINE or FT4	HIGH			
	NORMAL			
	LOW			PRIMARY HYPOTHYROID
		LOW	NORMAL	HIGH
		THYROID STIMULATING HORMONE - TSH		

# BASIC THYROID EVALUATION

FREE THYROXINE or FT4	HIGH	PRIMARY HYPERTHYROID		
	NORMAL			
	LOW			
		LOW	NORMAL	HIGH
		THYROID STIMULATING HORMONE - TSH		

# BASIC THYROID EVALUATION

FREE THYROXINE or FT4	HIGH			
	NORMAL			
	LOW	SECONDARY HYPOTHYROID		
		LOW	NORMAL	HIGH
		THYROID STIMULATING HORMONE - TSH		

# BASIC THYROID EVALUATION

FREE THYROXINE or FT4	HIGH		SECONDARY HYPERTHYROID	
	NORMAL			
	LOW			
		LOW	NORMAL	HIGH
		THYROID STIMULATING HORMONE - TSH		

# BASIC THYROID EVALUATION

FREE THYROXINE or FT4	HIGH			
	NORMAL	SUB-CLINICAL HYPERTHYROID		
	LOW			
		LOW	NORMAL	HIGH
		THYROID STIMULATING HORMONE - TSH		

# BASIC THYROID EVALUATION

FREE THYROXINE or FT4	HIGH			
	NORMAL			SUB-CLINICAL HYPOTHYROID
	LOW			
		LOW	NORMAL	HIGH
		THYROID STIMULATING HORMONE - TSH		

# BASIC THYROID EVALUATION

FREE THYROXINE or FT4	HIGH			
	NORMAL			
	LOW		NON THYROID ILLNESS or NTI	
		LOW	NORMAL	HIGH
		THYROID STIMULATING HORMONE - TSH		

# BASIC THYROID EVALUATION

FREE THYROXINE or FT4	HIGH	NTI or Pt. on THYROID HORMONES		
	NORMAL			
	LOW			
		LOW	NORMAL	HIGH
		THYROID STIMULATING HORMONE - TSH		

# BASIC THYROID EVALUATION

FREE THYROXINE or FT4	HIGH	PRIMARY HYPERTHYROID	NTI or Pt. on HYROID HORMONES	SECONDARY HYPERTHYROID
	NORMAL	SUB-CLINICAL HYPERTHYROID	EUTHYROID	SUB-CLINICAL HYPOTHYROID
	LOW	SECONDARY HYPOTHYROID	NON THYROID ILLNESS - NTI	PRIMARY HYPOTHYROID
		LOW	NORMAL	HIGH
		THYROID STIMULATING HORMONE - TSH		

# THYROID HORMONES

TEST	REFERENCE RANGE
TSH	Normal Range 0.3 - 4.0 mU/L
Free T <sub>4</sub>	Normal Range 0.7-2.1 ng/dL

TSH upper limit has been revised to **2.5 mU/L**



# Thyroid Disorder

**HYPERTHYROIDISM**

**HYPOTHYROIDISM**

**SOLITARY NODULE  
/GOITRE**

**POSTPARTUM  
THYROIDITIS**

**Thyroid disease is the second most common cause of endocrine dysfunction in women of child bearing age.**

**Hypothyroidism is more common during pregnancy than hyperthyroidism.**



# CONCLUSIONS

## Pearls for Practice

### Hypothyroidism

T4 essential for early fetal development

Little T4 crosses placenta after 1<sup>st</sup> trim

Adequate treatment – good outcome

### Hyperthyroidism

Careful D/D at early weeks

Untreated- poor preg. Outcome  
drugs cross placenta: lowest optimal dosage

Cord blood - Thyroid function

## Thyroid dysfunction

### Postpartum Thyroiditis

Occurs 3-4 mths postpartum

Autoimmune disorder

Phases of hyper-hypo-recovery

Annual thyroid function tests

### Thyroid nodule & Cancer

Defer preg. For 1 year after trt. With radioactive iodine

Nodule identified beyond 20 weeks-  
biopsy after delivery

Large goitre – anesthetic complications



# FIGO recommends the following:

- Screening for thyroid function is recommended in the first trimester particularly in countries with a deficient iodine diet and in symptomatic patients
  - TSH is the superior method for screening. Free T4 and TPO Ab testing are not recommended for screening. The best reliable tests for TSH are by C.I.A or 3<sup>rd</sup> generation R.I.A (Radio Immuno Assay). Notably normal thyroid test values change in pregnancy
  - Treatment for hypothyroidism is recommended when TSH levels are  $>2.5$  and  $>3,0$  IU/L during the first and second/third trimesters respectively. The only replacement therapy is L-thyroxine. The starting doses of L-thyroxine are presented in fig. 4. Instead treating subclinical hypothyroidism, in the presence of negative thyroid auto-antibodies, is still debatable. Importantly, women on L-thyroxine before pregnancy should increase their dosage by 30-50% when they first recognize the pregnant state.
  - Treatment of Hyperthyroidism due to Grave's disease is by anti thyroid drugs (Propylthiouracil (PTU) or Carbimazole/Methimazole (MMI) ). It is not recommended to change drugs during pregnancy Symptomatic (fig-1) treatment with beta- blockers for short term may be needed.
  - Primary, prevention of hypothyroidism is by a healthy diet and Iodised fortified salt (especially in iodine deficient areas).
  - If the patient has a thyroid nodule she should be evaluated and treated during pregnancy. The first steps are performance of a thyroid ultrasonogram and a fine needle aspiration (FNA) as needed. Surgery should be preferably deferred to the postpartum period.
- Follow up and postpartum TSH evaluation and reduction of L-thyroxine dose to pre- pregnant levels in patients with hypothyroidism.



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# CONCLUSIONS



# FOCUS ON GLOBAL STRATEGIES

AMELIORATE OUR PROFESSION OVERCOMING  
THE LIMITS OF NATIONAL SOCIETIES

GUIDELINES: **THE BEST PRACTICE ADVICE**

GLOBAL STRATEGIES FOR:

**PRETERM BIRTH PREVENTION**

**NON COMMUNICABLE DISEASES**

**PREVENTING EXPOSURE TO TOXIC CHEMICALS**



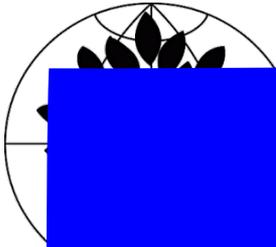
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## FIGHTING THE INEQUITY

Gathering data on maternal mortality and maternal health is notoriously difficult.

However, one thing is clear from all the statistics: although maternal and perinatal mortality and morbidity is falling globally

the perspectives for women-infants in poor resources countries are much worse than for those in industrialised countries.



**Education/  
Counseling**

**Preventive tools**

**Best  
Practice**

**Access to  
care**

**Risk factors/  
Markers  
Implementation**

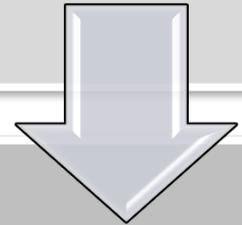
**Healthcare  
Systems/  
Insurance  
Coverage**



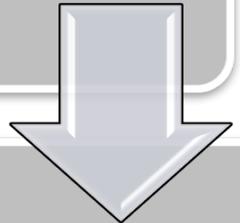
# Window of Opportunity



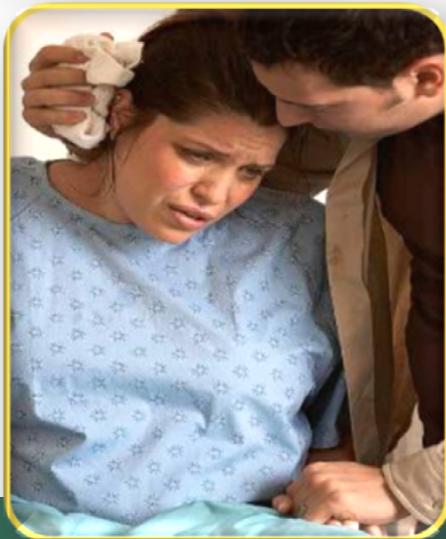
Pregnancy offers a **window of opportunity** to provide maternal care services to mother and offspring



Reduce traditional maternal and perinatal morbidity and mortality indicators



Address intergenerational prevention of preterm birth and NCDs, such as diabetes, hypertension, cardiovascular disease, and stroke.





On Sept 2015 the UN General Assembly adopted the “**Agenda 2030: Transforming our World**”, with a consensus of the World Government Community - introduced 17 sustainable development goals SDGs.

Many of the suggested SDG’s have Environmental and Reproductive health embedded in their goals



The United Nations Sustainable Development Summit for the adoption of the post-2015 development agenda and the **Sustainable Development Goals** will be held from 25 to 27 September 2015 in New York and convened as a high-level plenary meeting of the General Assembly.





It is a sheer co-incidence that September 2015 witnessed the 20<sup>th</sup> anniversary of the Beijing World Conference on Women under the slogan -“**Planet 50-50 by 2030: Set it up for Gender Equality**”.

**‘The Agenda 2030; Transforming our world’ or Planet 50-50 by 2030’ i.e. SDGs will not materialise without the contribution of 50% of its population i.e. women** - This can be achieved only with gender equality, equal education and employment opportunities + providing sexual reproductive health and rights.

Reproductive Health and Rights will not be complete unless we improve environmental Health

**FIGO was not and will not be a passive observer to bring about this required change and will act to make these dreams real for women.**

