



ПОЛТАВСЬКИЙ  
ДЕРЖАВНИЙ МЕДИЧНИЙ  
УНІВЕРСИТЕТ

Department of Orthodontics

Ukraine NOW



3 course

Features of orthodontic patient' clinical examination. Diagnostic and classification of the malocclusion. Laboratory methods of orthodontic patients' examination with malocclusion. Orthodontic diagnosis making

## Plan of lecture:

1. Orthodontic patient' clinical examination.
  2. Laboratory methods of orthodontic patients' examination with malocclusion.
  3. Diagnostic and classification of the malocclusion.
  4. Orthodontic diagnosis making.
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# Clinical examination

Subjective examination

Objective examination

Primary diagnosis

## Paraclinical examination

Finally diagnosis

Plan of treatment

Method of treatment

Appliances

X-ray method  
Biometric method  
Anthropometric method  
Functional method  
Cephalometry  
CT  
MRI

# **Subjective data**



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graph TD; A[Subjective data] --> B[Passport data]; A --> C[Complaints]; A --> D[Anamnesis of life]; A --> E[Anamnesis of disease];
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**Passport data**

**Complaints**

**Anamnesis of life**

**Anamnesis of disease**

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# Passport data

Name

Age:

Passport



Dental



Biological



Bone



# Passport data

Address

Amount of sunny days

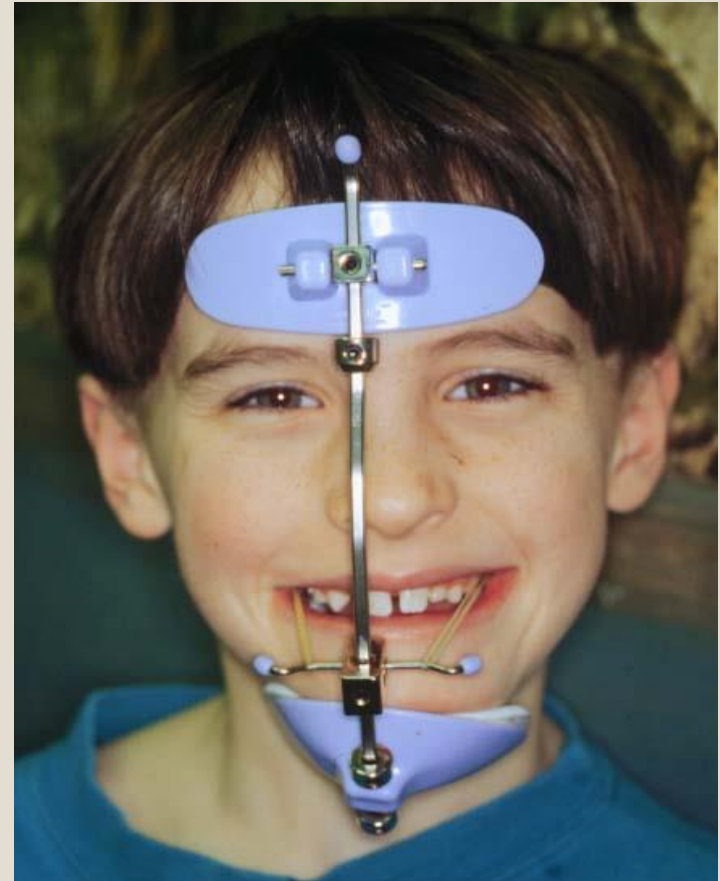


Minerals in the water



# Passport data

Sex





# Passport data

## School or kindergarten





# Complaints

- Aesthetic disorders;
- Incorrect position of some teeth or groups of teeth;
- Incorrect speech function;
- Incorrect functions (breathing, swallowing, masticatory, lips closing);
- Disorders of appliances fixation;
- Pain.

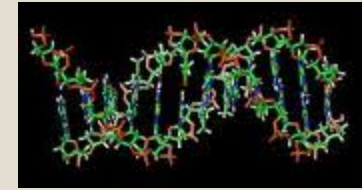


# Anamnesis of life

-parents' age;



-biological deficiency of the sexual cells;



-viruses diseases;



-toxics of 1 or 2 part of pregnancy;

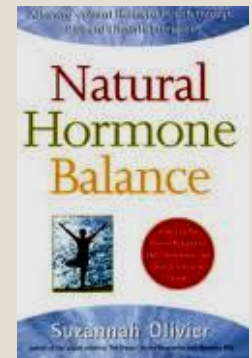
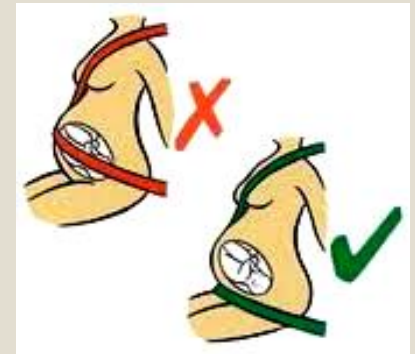


-triplet or quadruplet pregnancy;



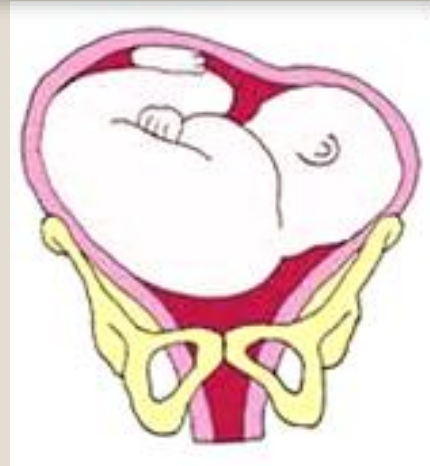
# Anamnesis of life

- medicines using during pregnancy;
- bad habits during pregnancy;
- mechanical (trauma);
- nitro paints or benzene vapors influence;
- hormonal disorders;
- hypoxia.



# Anamnesis of life

- premature baby;



-type of delivering;

- embryo position;

- assisting of birth.

Vacuum-assisted birth



Forceps-assisted birth





# Anamnesis of life

## Relation of alveolar processes



# Anamnesis of life

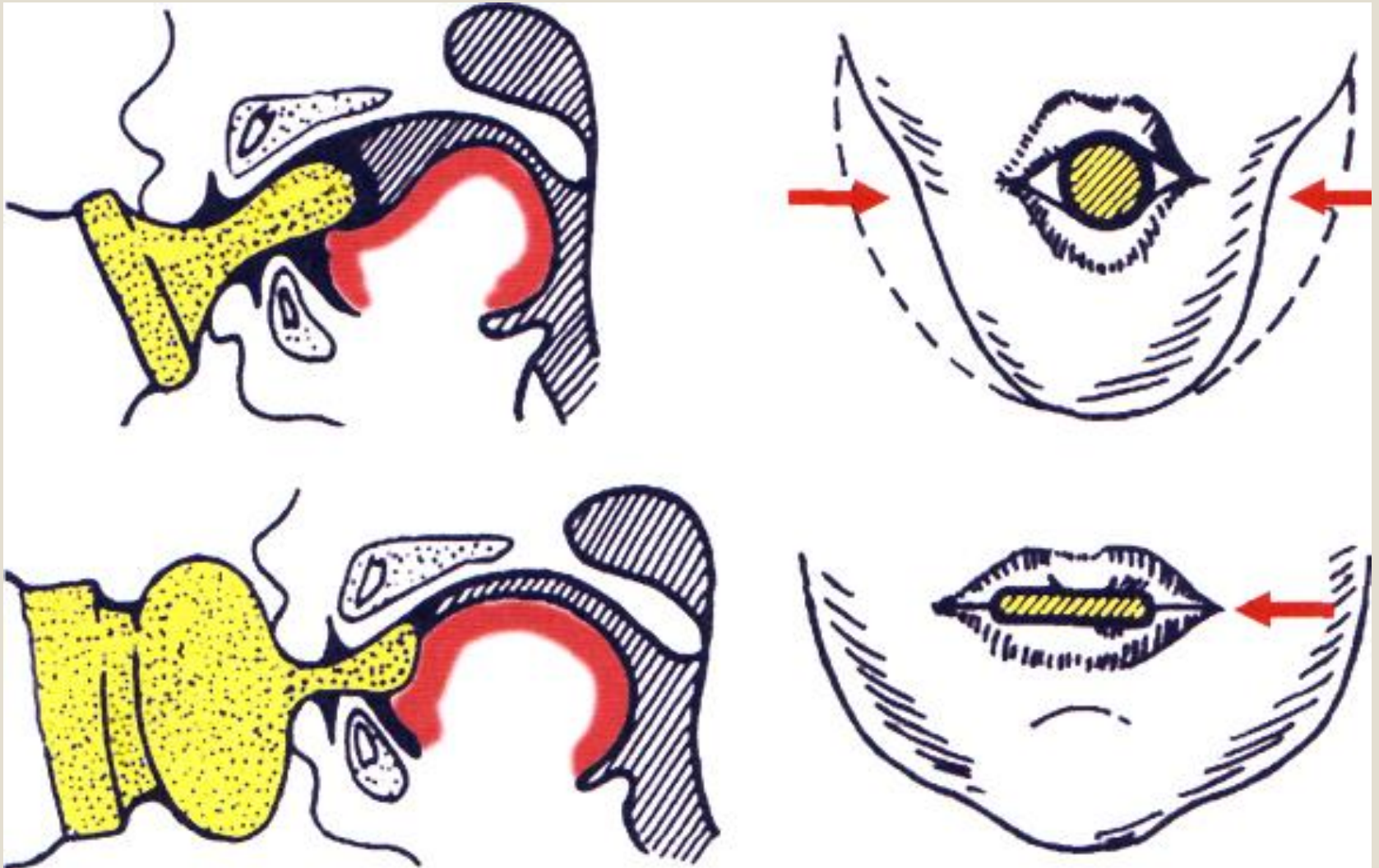
## Type of feeding





# Anamnesis of life

In case of artificial feeding – length and shape of dummy



# Anamnesis of life

Durable bottle feeding



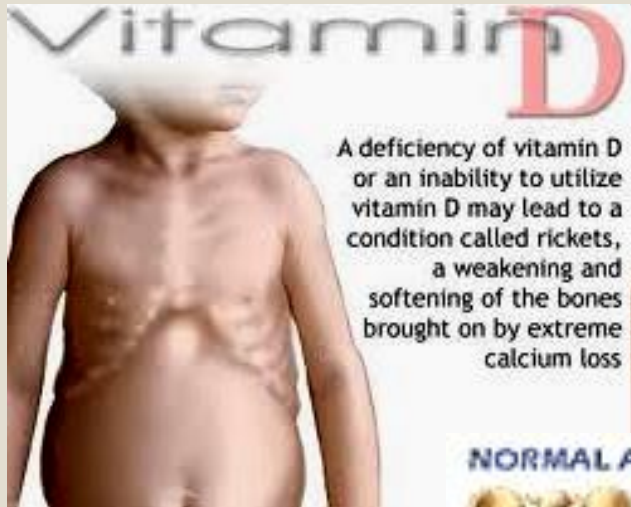
# Anamnesis of life

Durable dummy using



# Anamnesis of life

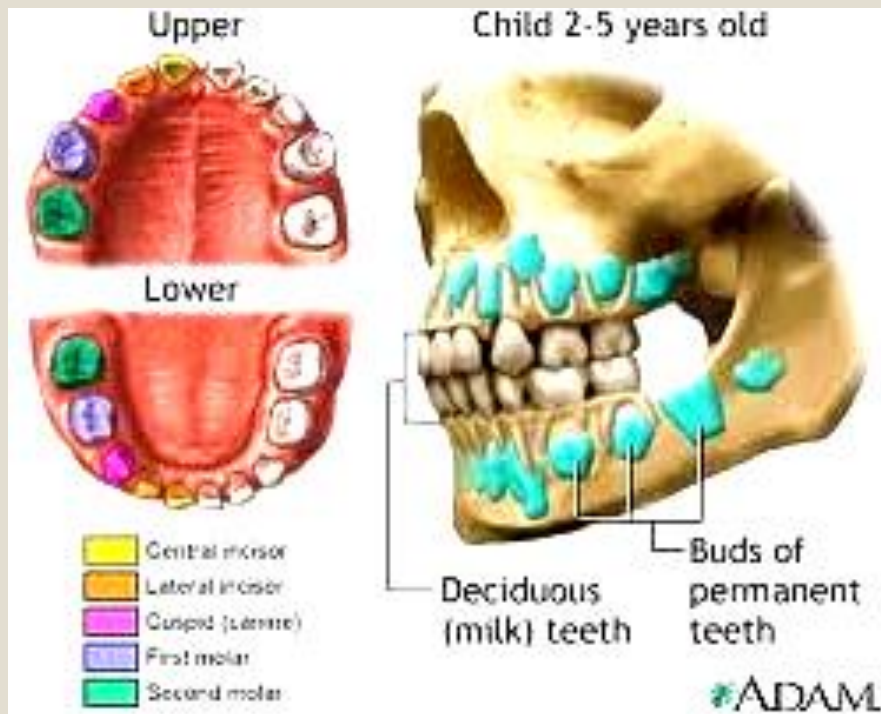
## Diseases of childhood (rachitic)





# Anamnesis of life

## Disorder of teeth eruption' terms



# Anamnesis of life

## Hypo- or hyperdentia





# Anamnesis of life

## Macro-, microdentia



# Anamnesis of life

## Early teeth extraction



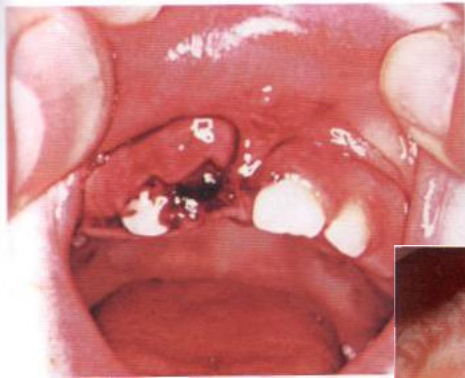
## Hypertrophy of palatal tonsils





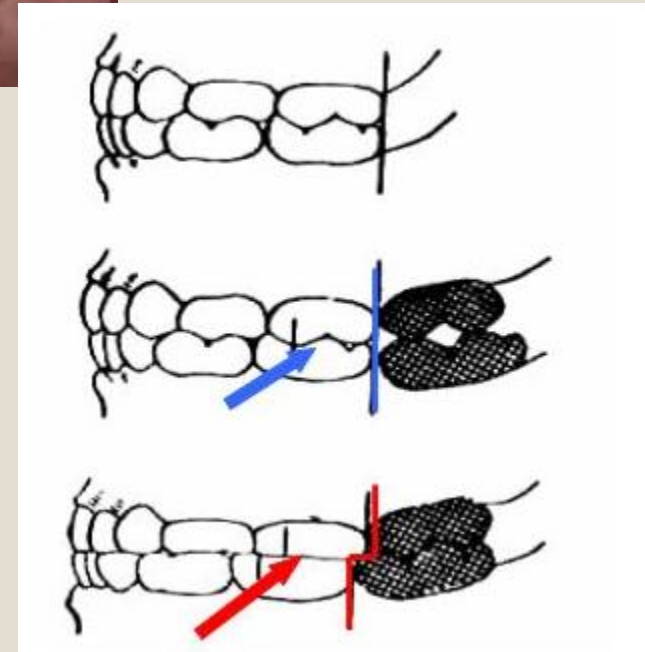
# Anamnesis of life

## Trauma



# Anamnesis of life

Untimely, uneven abrasion of the temporary teeth or its absence, incorrect symptom by Tsyliński



## Classification of bad habits (by Okushko V.P.)

**1 group – habit of sucking (fixed moving reactions):**

- habit of finger sucking;**
- habit of sucking and biting of lips, cheeks, different things;**
- habit of sucking and biting of tongue.**

**2 group – functional disorders (fixed abnormal functions):**

- disorder of masticatory function (chewing);**
- disorder of swallowing function or habit of tongue pressing on the teeth;**
- oral breathing;**
- disorder of speech.**

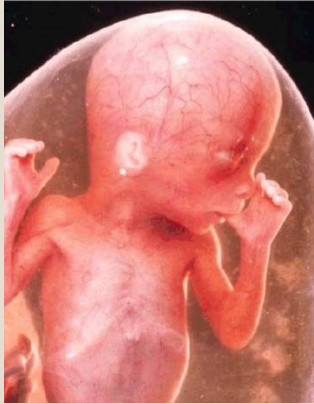
**3 group – incorrect different body part's position during the day and sleeping (fixed posetonic reflexes).**

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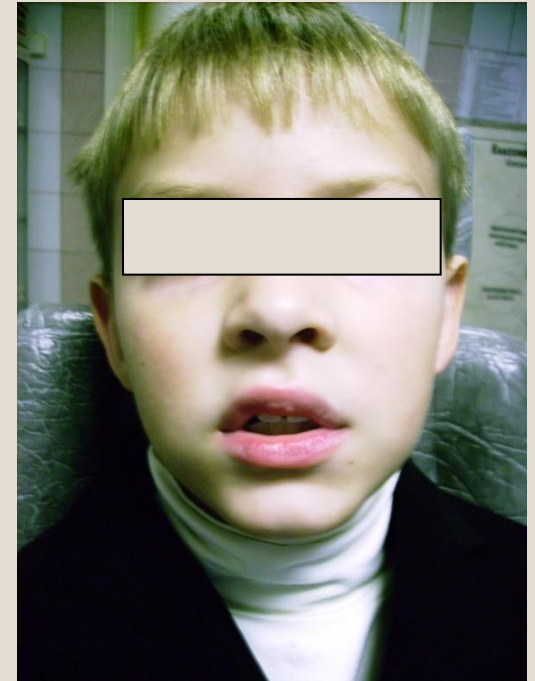
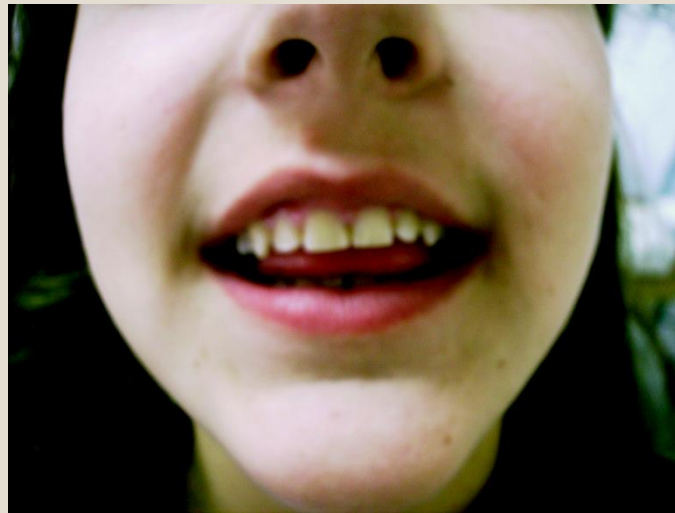
# Anamnesis of life

## I. Habit of sucking (fixed moving reactions):



# Anamnesis of life

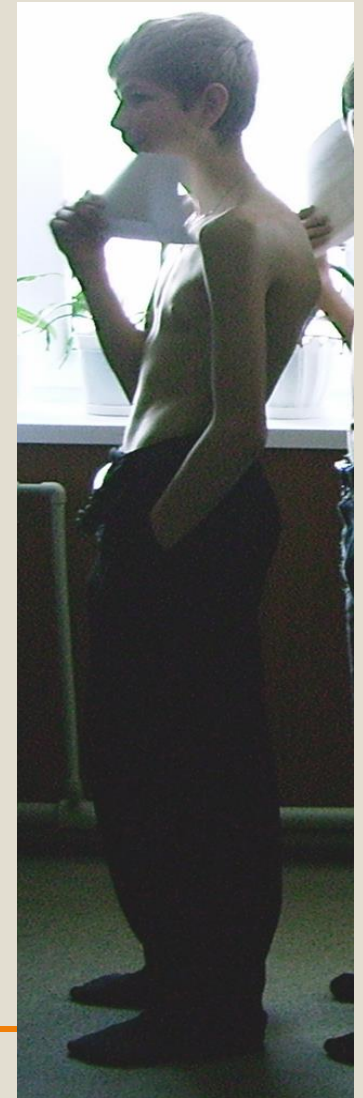
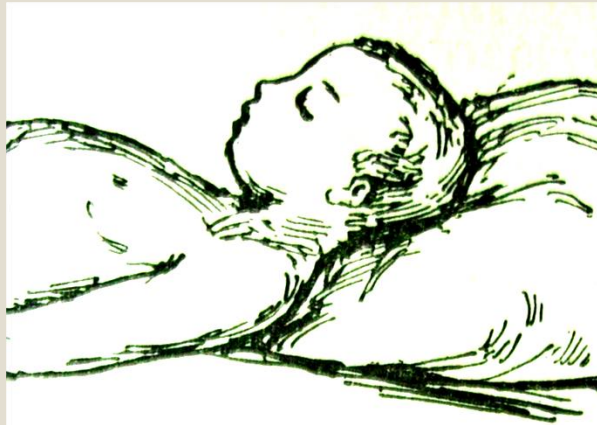
## II. Functional disorders (fixed abnormal functions):





# Anamnesis of life

**III. incorrect different body part's position during the day and sleeping (fixed pose tonic reflexes).**



# Anamnesis of life

## Hereditry (similar mother and daughter)



## **General diseases:**

- Lungs system;
  - Endocrine system;
  - Neurological system;
  - Allergy status.
-

# Anamnesis of diseases

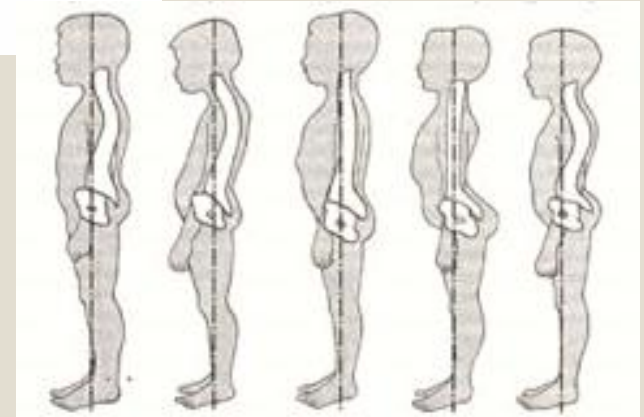
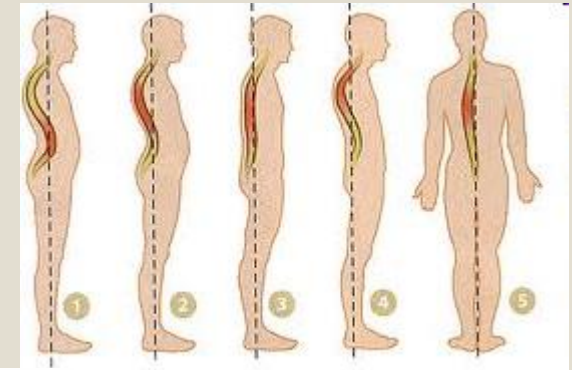
- Duration and dynamic of diseases;
  - Methods of treatment and they effectiveness;
  - Heredity.
-



# General examination

## Disorders of bearing:

- Normal;
- Rectified;
- Round-shouldered;
- Kyphosis;
- Lordosis;
- Scoliosis.



# General examination

## General data:

### Constitution:

-normal;

-hypersthenia;

-hyposthenia;

### Stage of fatness:

-middle;

-lower;

-heightened;

-obesity.

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## Head examination:

-proportionality;

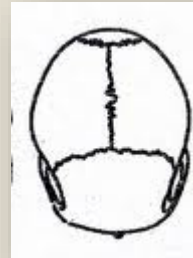
-sizes;

-shape:

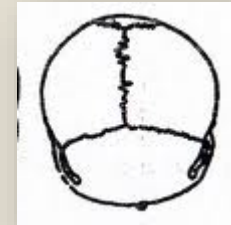
- dolichocephalism



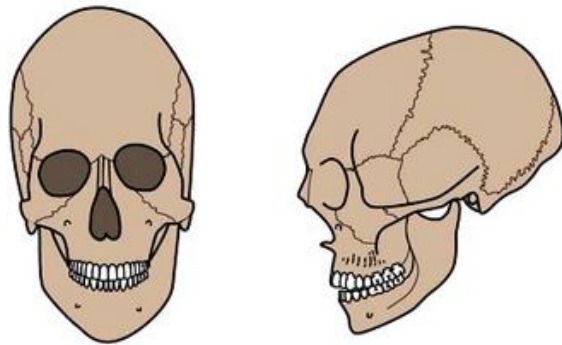
- mesocephalism



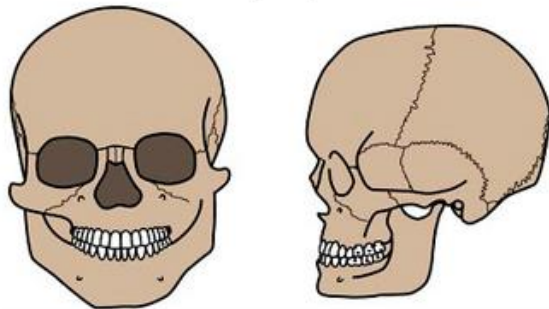
- brachicephalic



dolichocephalic



brachycephalic



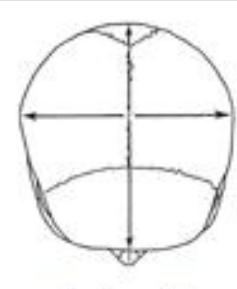
Cephalic indices



Dolichocephalic



Mesocephalic



Brachycephalic

Facial indices



Leptoprosopic



Mesoprosopic



Euryprosopic

Table 1 - Head classification according to the cephalic index.

Ultradolichocephalic	x - 64.9
Hyperdolichocephalic	65.0 - 69.9
Dolichocephalic	70.0 - 74.9
Mesocephalic	75.0 - 79.9
Brachycephalic	80.0 - 84.9
Hyperbrachycephalic	85.0 - 89.9
Ultrabrachycephalic	90.0 - x
Cranial index	Maximum skull width x 100
	Maximum skull length

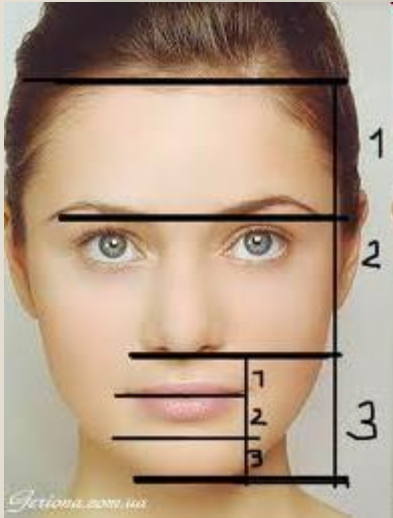


## Shape and size of the face:

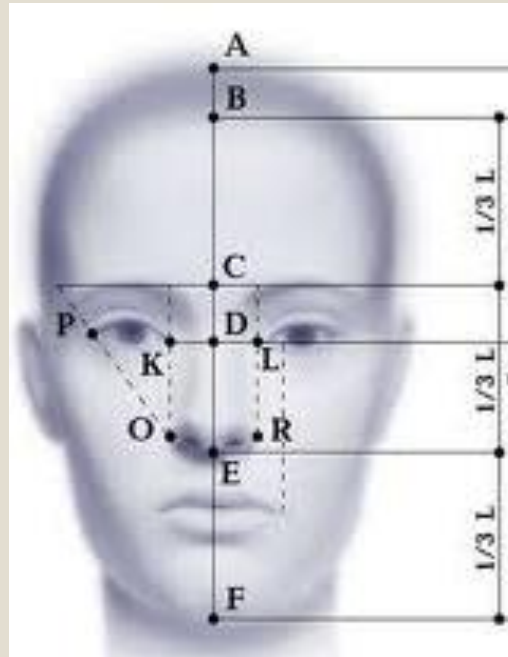
- width (narrow, wide, middle);
- length (long, middle, short);
- shape (round, square, oval, triangle with base to up or down, hexahedron).



# Examination

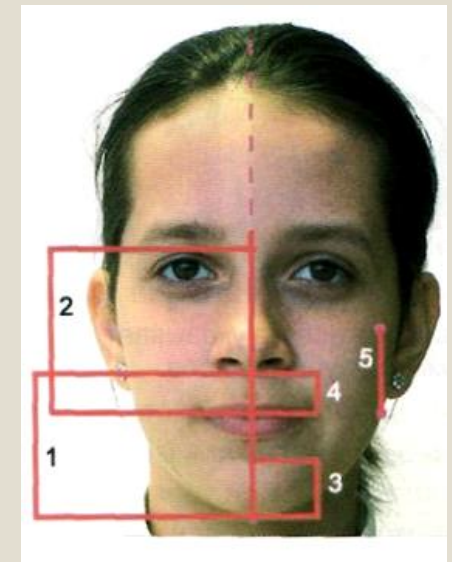
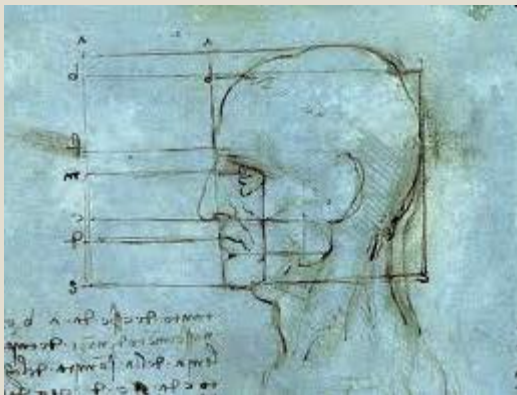


## Proportionality of the face:



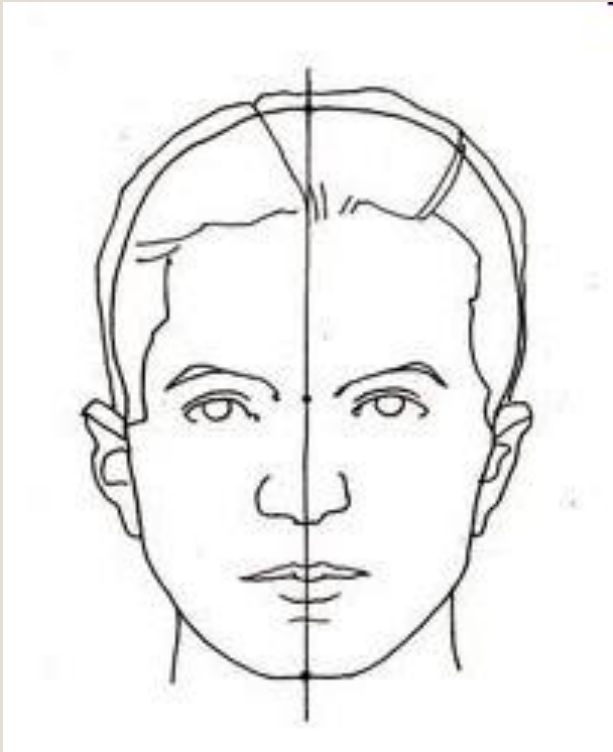
Points for face measuring:

- 1- Tr;
- 2- Oph;
- 3- Sn;
- 4- Gn.



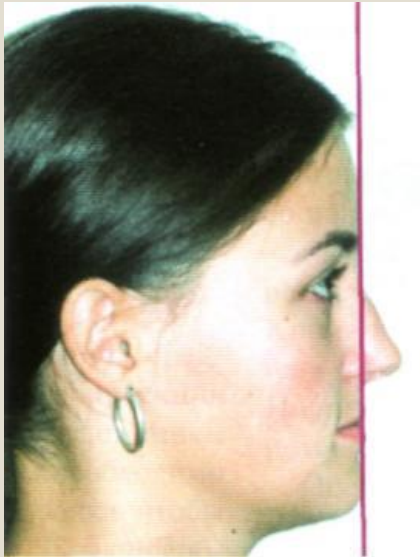
# Examination

## Symmetry of the face:



# Examination

## Profile of the face:



Strait



Convex



Concave





# Examination

## Contour of front:

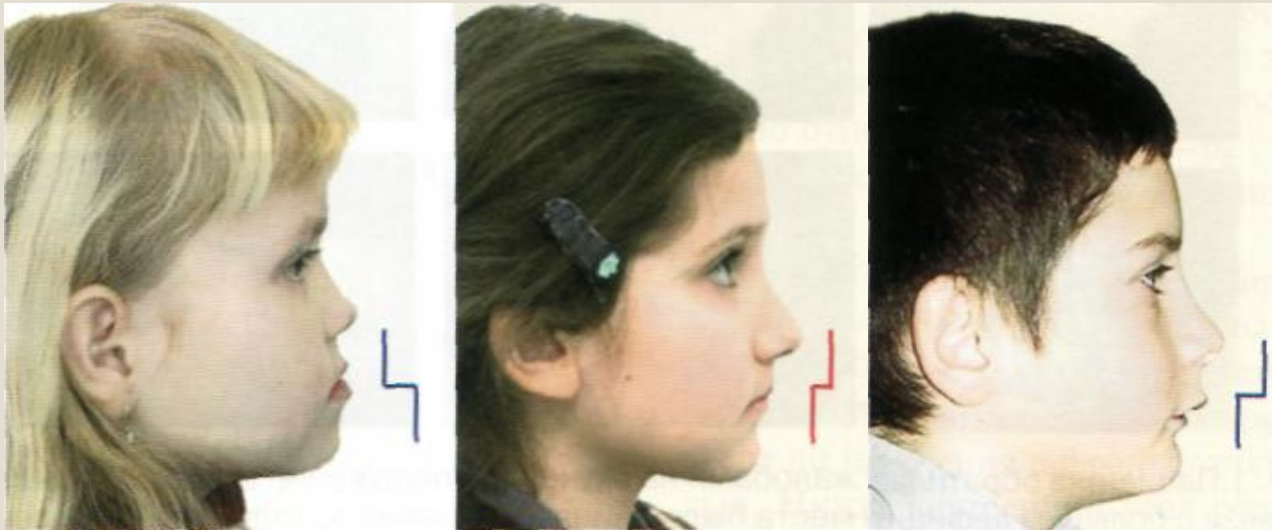


sloping

protrusive

flat

## Lips stair by Korkhaus



Positive lip stair

Normally negative  
lip stair

Very negative  
lip stair

# Examination

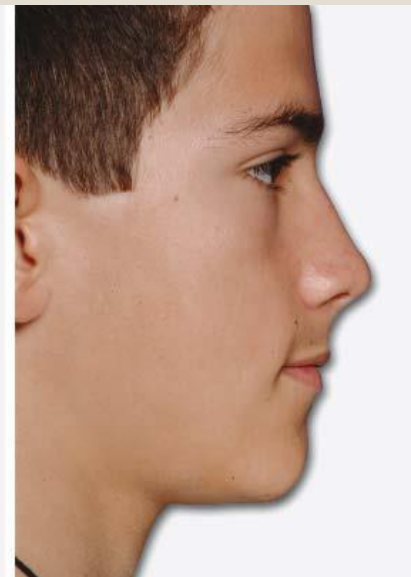
## Expressing of natural folds

### Folds:

- naso-labial;
- labial-chin.

### Expressing of fold:

- smoothed;
- deep;
- middle.



# Examination

## Lips closing (symptom of the thimble or lemon crust)

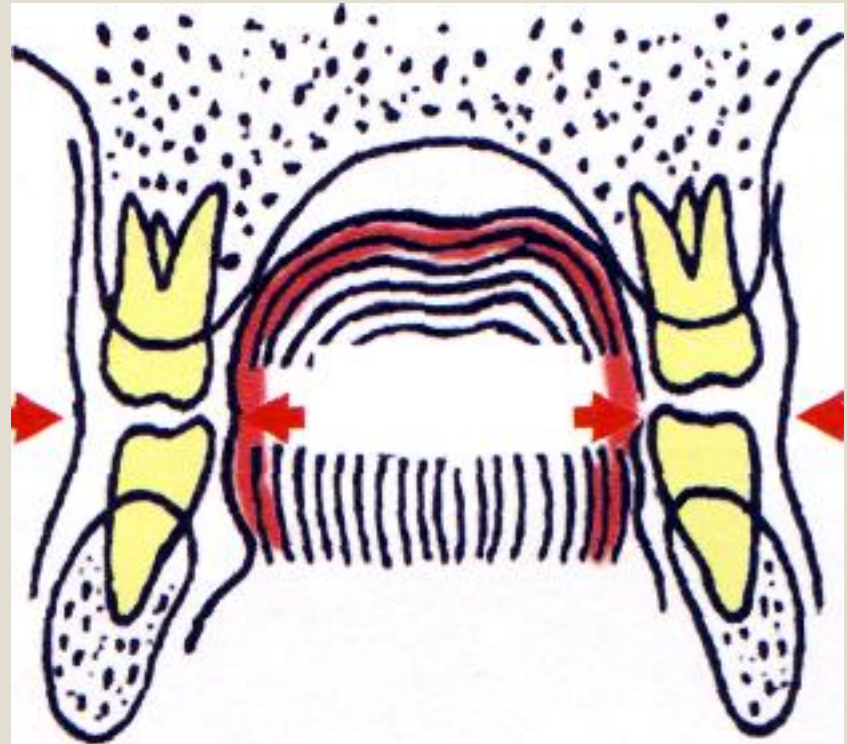
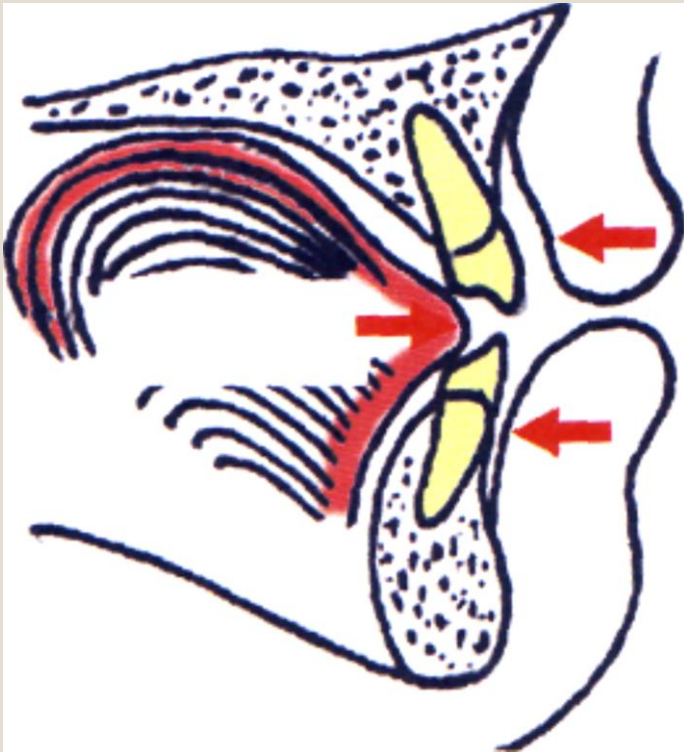
### Lips closing:

- free;
- tensely;
- open mouth.





## Miodinamic balance by Vinders



# Oral cavity examination

## Vestibulum examination

### Depth of vestibulum by Obrazcov:

- very short – up to 3 mm;
- short – up to 5 mm;
- middle – 5-10 mm;
- deep – more then 10 mm.



# Oral cavity examination

## Frenulums fixation





# Oral cavity examination

## Tongue frenulum fixation





# Oral cavity examination

## Bite condition:

### a) in the sagittal plane:

- Incisors covering;
- Presents of the overjet, its size - \_\_\_\_\_mm;
- Canines relation: neutral, distal, mesial;
- First permanent molars relation: neutral, distal, mesial;



# Oral cavity examination

## b) in the vertical plane:

- depth of incisors covering (normal, up to  $\frac{2}{3}$ , more than  $\frac{2}{3}$ );
- size of the vertical gap (in mm - \_\_\_\_\_, in area of some teeth - from \_\_\_\_\_ to \_\_\_\_\_);
- presents of contact between lateral teeth.

