

**Syllabus - Distance learning**  
**Winter Semester 2020/2021**  
**Week 3**

**General Medicine**

**1. Online lecture via Microsoft Teams**

Disorders of nutrition; Obesity, Malnutrition qualit. & quantitative; Dietology

**2. Online seminars via Microsoft Teams according to schedules on department webpage (patfyz.medic.upjs.sk)**

Genetics – overview

- Types and mechanisms of mutations
- Monogenic diseases
- Monogenic diseases with non-Mendelian inheritance (imprinting, triplet repeat mutations, mitochondrial diseases)
- Chromosomal aberrations structural & numeric
- Genetic background of complex diseases (polygenic heredity, polymorphism, epigenetic mechanisms etc.).

**Student presentations:** during the online seminar according to the schedule within each group.

**Dental Medicine**

**1. Online lecture via Microsoft Teams**

Disorders of nutrition in dentistry; (incl. obesity, malnutrition, avitaminoses).

**2. Online seminars via Microsoft Teams according to schedules on department webpage (patfyz.medic.upjs.sk)**

Genetics – overview

- Types and mechanisms of mutations
- Monogenic diseases
- Monogenic diseases with non-Mendelian inheritance (imprinting, triplet repeat mutations, mitochondrial diseases)
- Chromosomal aberrations structural & numeric
- Genetic background of complex diseases (polygenic heredity, polymorphism, epigenetic mechanisms etc.).

**Student presentations:** during the online seminar according to the schedule within each group.

**3. Recommended audiovisual materials**

Obesity

- Leptin and Ghrelin hormones [https://www.youtube.com/watch?v=ev-IN\\_pXESk](https://www.youtube.com/watch?v=ev-IN_pXESk)
- Genetics of obesity <https://www.dw.com/en/the-genetics-of-obesity/av-51619892>

Genetics

Monogenic diseases

- Marfan syndrome <https://www.youtube.com/watch?v=p4Ev9KEyw78>
- Sickle cell anemia [https://www.youtube.com/watch?v=fIJmg\\_1hv0](https://www.youtube.com/watch?v=fIJmg_1hv0)
- Familial hypercholesterolemia <https://www.youtube.com/watch?v=kT9b7ojiU3U>

Chromosomal diseases

- Turner syndrome [https://www.youtube.com/watch?v=fdG\\_Fi0YE2s](https://www.youtube.com/watch?v=fdG_Fi0YE2s)
- Down syndrome [https://www.youtube.com/watch?v=ze\\_6VWwLtOE](https://www.youtube.com/watch?v=ze_6VWwLtOE)
- Klinefelter syndrome <https://www.youtube.com/watch?v=2i0Ms71DN44>

Nonmendelian inheritance

- Fragile X chromosome <https://www.youtube.com/watch?v=afH4-xFVmY>
- Huntington disease <https://www.youtube.com/watch?v=nJoS5MOqmH4>
- Prader-Willi syndrome <https://www.youtube.com/watch?v=nYvm4Rsh7t8>