Key concepts in Digestion...
GORD module

Protection of the digestive system

...practising safe digestion...

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Slide 2

Contribution to the following milestone set out for CLC1:

FoP2.1(1) identify and describe the common/serious, extrinsic and intrinsic factors that can affect the normal biological processes in individual organs or organ systems, which could affect the level of oral and general health risk, treatment complications and/or outcomes

How can we practice safe digestion?

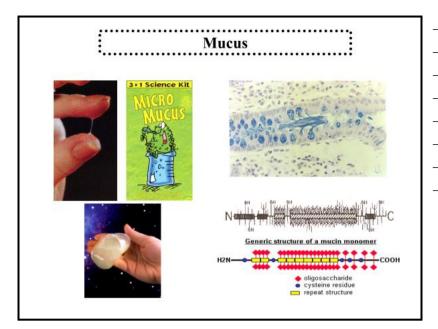
Objectives: - To develop an understanding of:

- the defensive role of the mucosal barrier and the consequences for the gut when protection fails
- 2. how the gastrointestinal epithelium responds when insult leads to injury
- 3. how the gut detects and removes infectious agents
- 4. the mechanisms to sense and remove any damaged/mutated cells
- 5. the mechanisms and regulation of vomiting

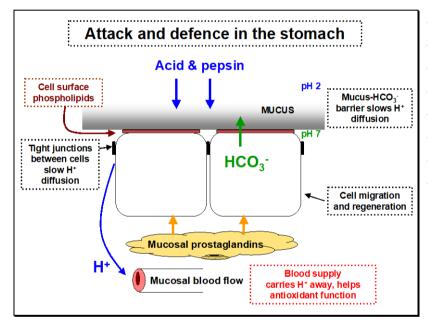
Slide 3

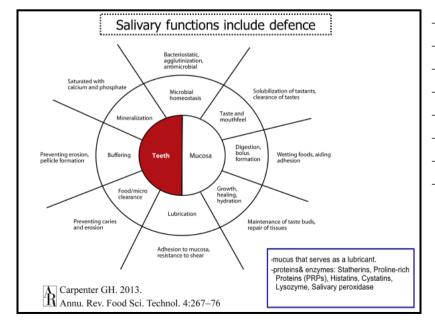
Attack and defence in the gut **Damaging Protective** Acid and pepsin Mucus-HCO₃ Ingested drugs (alcohol, aspirin) Cell membrane Refluxed bile Cell migration and renewal Mucosal blood flow Smoking Micro-organisms (e.g. H.pylori) **Prostaglandins** Ischemia (oxidative stress) Immune system Food allergens Acid inhibition Programmed cell death

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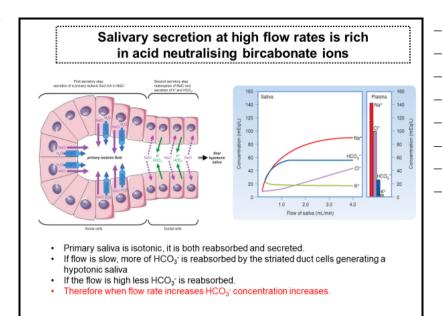


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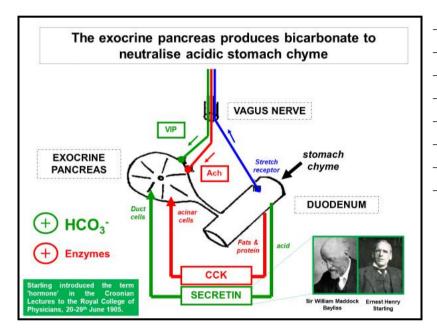


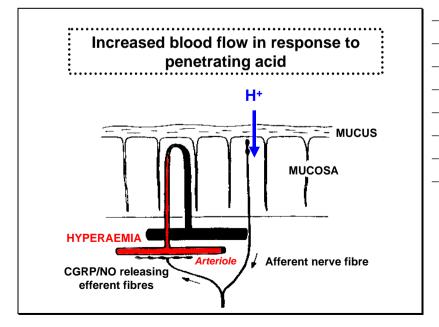


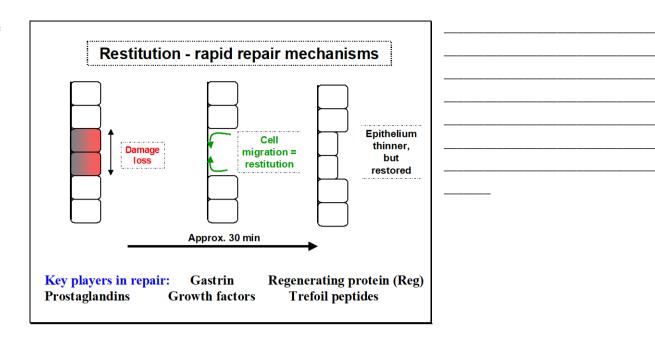
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Slide 8

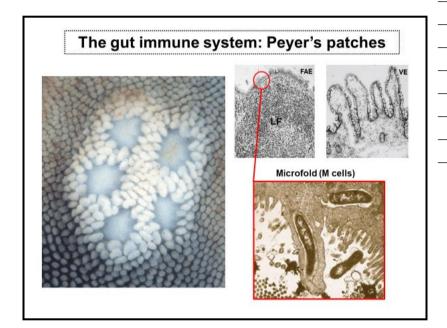


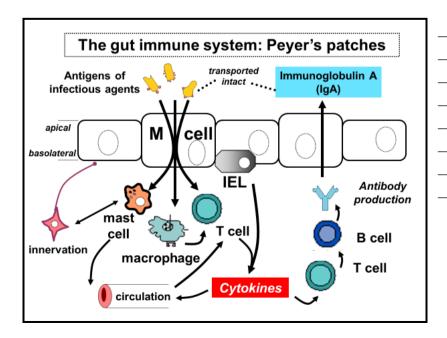




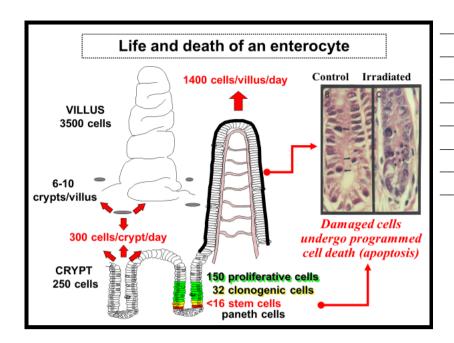
Gastrin stimulates migration The post addition of gastrin Noble PJ et al., Am J Physiol (Gastrointest Liver Physiol.) 2003; 284(1):G75-84.

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Slide 14



Slide 15

