Edexcel iGCSE Biology 4BI0 Learning Plan

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| **Section B4: Food and Digestion** | | |
| Specification | Resources | Assessment |
| 2.23 understand that a balanced diet should include appropriate proportions of carbohydrate, protein, lipid, vitamins, minerals, water and dietary fibre  2.24 identify sources and describe functions of carbohydrate, protein, lipid (fats and oils), vitamins A, C and D, and the mineral ions calcium and iron, water and dietary fibre as components of the diet  2.25 understand that energy requirements vary with activity levels, age and pregnancy  2.26 describe the structures of the human alimentary canal and describe the functions of the mouth, oesophagus, stomach, small intestine, large intestine and pancreas  2.27 understand the processes of ingestion, digestion, absorption, assimilation and egestion  2.28 explain how and why food is moved through the gut by peristalsis  2.29 understand the role of digestive enzymes, to include the digestion of starch to glucose by amylase and maltase, the digestion of proteins to amino acids by proteases and the digestion of lipids to fatty acids and glycerol by lipases  2.30 understand that bile is produced by the liver and stored in the gall bladder, and understand the role of bile in neutralising stomach acid and emulsifying lipids  2.31 describe the structure of a villus and explain how this helps absorption of the products of digestion in the small intestine 2.32 describe an experiment to investigate the energy content in a food sample. | Video: Biology Section 2 – Lesson 3 – Nutrition - Humans  Powerpoint: Biology Section 2 – Lesson 3  Textbook:  Page 37 Chapter 4: Food and Digestion  Page 37 – A balanced diet  Page 42 – Tests for starch and glucose  Page 43 – Energy from food  Page 46 – Digestion  Page 49 – Absorption in the ileum  Page 50 – The large intestine – elimination of waste  Page 51 – Chapter Checklist  Edexcel iGCSE Biology Checklist Section B4.doc  DVD Revision check list  **Practicals and other resources**  <http://biology-igcse.weebly.com/summary.html>  <http://biology-igcse.weebly.com/11.html>  <http://biology-igcse.weebly.com/21.html> | Textbook  Page 51-52 End of Chapter Questions  Chapter 4 Textbook Answers - pdf  DVD Multiple choice test  Section B4 - exam question - pdf  Section B4 - exam question mark scheme – pdf  Talking paper video – Section B4 Food and Digestion |

Videos – www.igcsesciencecourses.com

Textbook Ref: Edexcel International GCSE Biology Student Book - Pearson (Bradfield and Potter)

DVD Video Clips – see resource DVD in textbook.