# A2 –Factors affecting growth and development

## **Physical Factors**

#### **Lifestages**

1. Infancy (0 – 2 years) 2. Early childhood (3 – 8 years) 3. Adolescence (9 – 18 years) 4.. Early adulthood (19 – 45 years) 5. Middle adulthood (46 – 65 years)

6. Later adulthood (65+ years

Milestones - A significant event or stage in life, progress, development. Life Expectancy- How long people are expected to live Life Course - The path of the human cycle.

## **Physical Factors**

Chronic illness (one with long term symptoms, the illness cannot usually be cured).

May affect growth in infancy and childhood, impact the process of puberty and in later life cause tiredness and affect mobility.

Intellectually children may miss school, it can affect memory and concentration and impact decision making. It can also affect independence and cause people to withdraw from day to day activities.

### **Physical Factors: Inherited Conditions**

## Muscular Dystrophy

The muscular dystrophies (MD) are a group of inherited genetic conditions that gradually cause the muscles to weaken, leading to an increasing level of disability.

#### **Marfan Syndrome**

Marfan syndrome is a disorder of the body's connective tissues, a group of tissues that maintain the structure of the body and support internal organs and other tissues.

#### **Huntington's Disease**

Huntington's disease is a condition that stops parts of the brain working properly over time.

### Physical ill health:

#### Cardio -vascular disease

Cardiovascular disease (CVD) is a general term for conditions affecting the heart or blood vessels. It's usually associated with a build-up of fatty deposits inside the arteries (atherosclerosis) and an increased risk of blood clots. It can also be associated with damage to arteries in organs such as the brain, heart, kidneys, and eyes. CVD is one of the main causes of death and disability in the UK, but it can often largely be prevented by leading a healthy lifestyle.

# **Obesity**

The term obese describes a person who's very overweight, with a lot of body fat. It's a common problem in the UK that's estimated to affect around 1 in every 4 adults and around 1 in every 5 children aged 10 to 11.

# **Diabetes Type 2**

Type 2 diabetes is a common condition that causes the level of sugar (glucose) in the blood to become too high. It can cause symptoms like excessive thirst, needing to pee a lot and tiredness. It can also increase your risk of getting serious problems with your eyes, heart and nerves. It's a lifelong condition that can affect your everyday life. You may need to change your diet, take medicines and have regular check-ups. It's caused by problems with a chemical in the body (hormone) called insulin. It's often linked to being overweight or inactive, or having a family history of type 2 diabetes.

Metal ill Health. There are many different types of mental illness. It affects the way people feel about themselves and how they interact with others. Individuals experiencing mental health illness will have high levels of stress and anxieties.

### **Sickle Cell Disease**

Sickle cell disease is the name for a group of inherited health condition The most serious type is called sickle cell anaemia.







Sickle cell disease is particularly common in people with an African or Caribbean family background. People with sickle cell disease produce unusually shaped red blood cells that can cause problems because they do not live as long as healthy blood cells and can block blood vessels.

Sickle cell disease is a serious and lifelong health condition, although treatment can help manage many of the symptoms.

#### **Cystic Fibrosis**

Caused by defective gene – a damaged gene that doesn't work properly. It leads to production of defective protein causing mucus production in lungs, pancreas & intestines. This causes problems breathing.

## Rheumatic disease

Covers a wide range of disorders involving inflammation of joints, ligaments, bones & muscles. Rheumatoid arthritis affects approx. 8/1000 in UK – increased risk through genetics.

#### Asthma

Airways become swollen, Can be caused by genetics. With most genetic diseases, people can normally lead a healthy life but their needs may differ.

It is very common for childhood illnesses to result in periods away from school which effects opportunities for learning, socialising and playing and making friends with other children. If a young person is not able to do some of the things that other children do, for example going to parties or playing sports they may feel different to other children, and perhaps become isolated and feel frustrated and angry.

### **Stress**

Stress commonly causes or exacerbates illnesses. Stress has been linked to the development of problems such as high blood pressure, coronary artery disease, and is thought to 'switch on' genetic markers for other diseases. People living with a chronic disease, for example, muscular skeletal problems or respiratory disease, often find that the symptoms of their disease are heightened when suffering stress.

Before adulthood people's tolerance for stress is lower and often need other people to help them regulate the amount of stress that they are exposed to. For the young person, too much stress can 'overload' the nervous system, leading to emotional and behavioural difficulties. It is not uncommon

<u>Disabilities</u> (Something that may limit an individual's ability to carry out some activities).

for young people when exposed to stress to regress to earlier and less advanced developmental stages.

Disability is part of being human. Almost everyone will temporarily or permanently experience disability at some point in their life. Over 1 billion people – about 15% of the global population – currently experience disability, and this number is increasing due in part to population ageing and an increase in the prevalence of noncommunicable diseases. Disability results from the interaction between individuals with a health condition, such as cerebral palsy, Down syndrome, and depression, with personal and environmental factors including negative attitudes, inaccessible transportation and public buildings, and limited social support.

A person's environment has a huge effect on the experience and extent of disability. Inaccessible environments create barriers that often hinder the full and effective participation of persons with disabilities in society on an equal basis with others. Progress on improving social participation can be made by addressing these barriers and facilitating persons with disabilities in their day to day lives.

Sensory Impairment (Partial or complete loss of the senses). Dependent on the severity of the sensory impairment it will impact on the areas of development. Impairment may be from birth or can appear in later adulthood.





Explain how different factors have affected growth and development of a selected individual. Compare the different factors that have affected growth and development across three life stages for a selected individual. Assess the changing impact of different factors in the growth and development across three life stages of a selected individual.