



B12 –YOUR QUESTIONS,WHAT YOU WANTED TO KNOW

HCA PROTECTED LEARNING TIME (PLT) APRIL 2018



WHAT YOU WANTED TO KNOW/LEARN ABOUT B12

WHY DO WE NEED B12?

WHAT MAKES B12 LOW?

WHAT IS INTRINSIC FACTOR?

WHAT ARE THE SYMPTOMS OF LOW B12?

WHAT BLOOD TESTS ARE NEEDED TO DIAGNOSE LOW B12?

HOW LONG DO PATIENTS NEED TO BE ON B12?

WHAT FOODS HELP WITH LOW B12 LEVELS?

WHAT TRAINING DO I NEED TO HAVE FOR GIVING B12 INJECTIONS?



**YOUR
QUESTIONS
ANSWERED!**

WHY DOES THE BODY NEED B12?

Vitamin B12 is a nutrient that helps keep the **body's** nerve and blood cells healthy and helps make DNA, the genetic material in all cells. **Vitamin B12** also helps prevent a type of anaemia called megaloblastic anaemia that makes people tired and weak

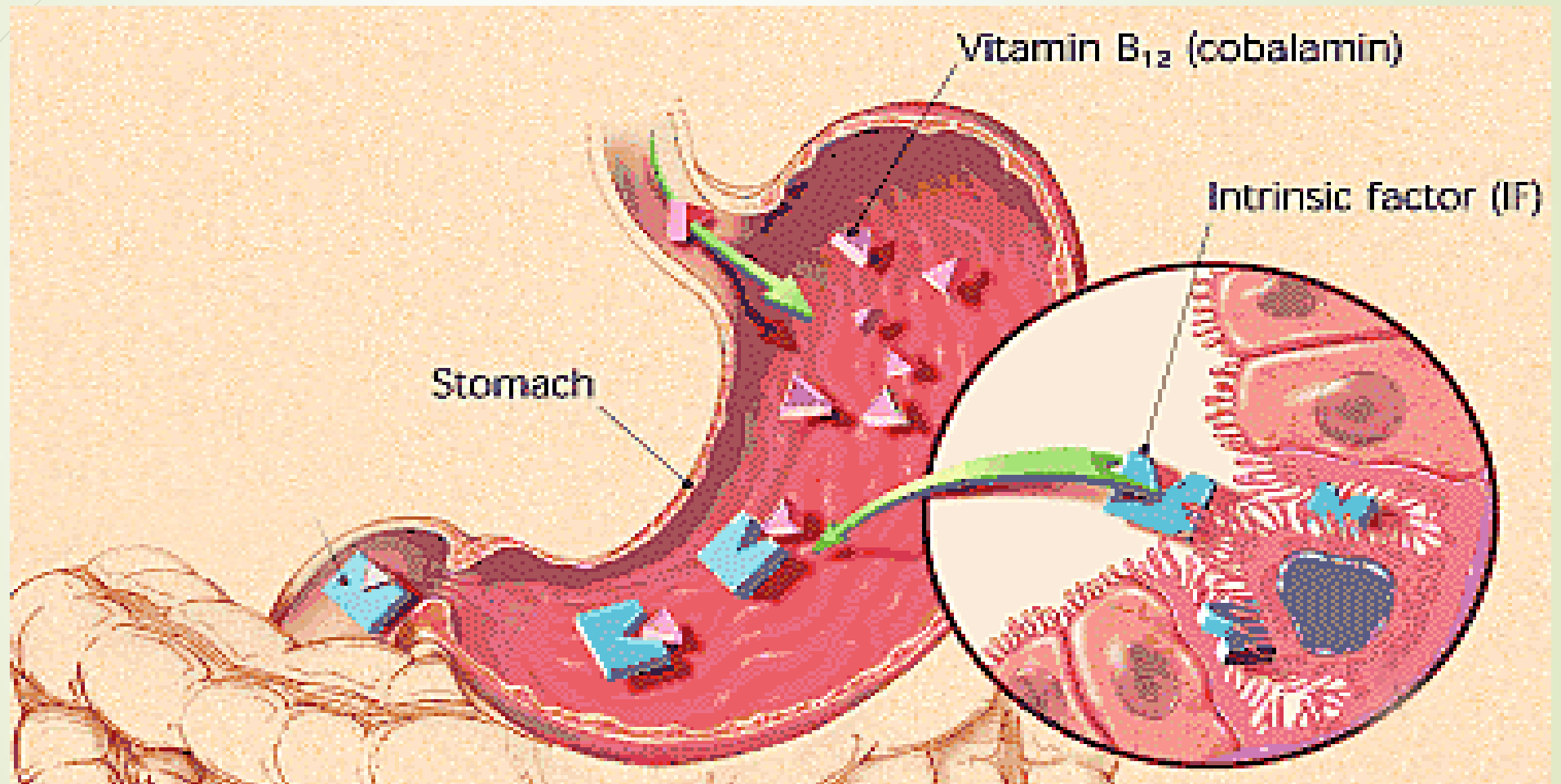




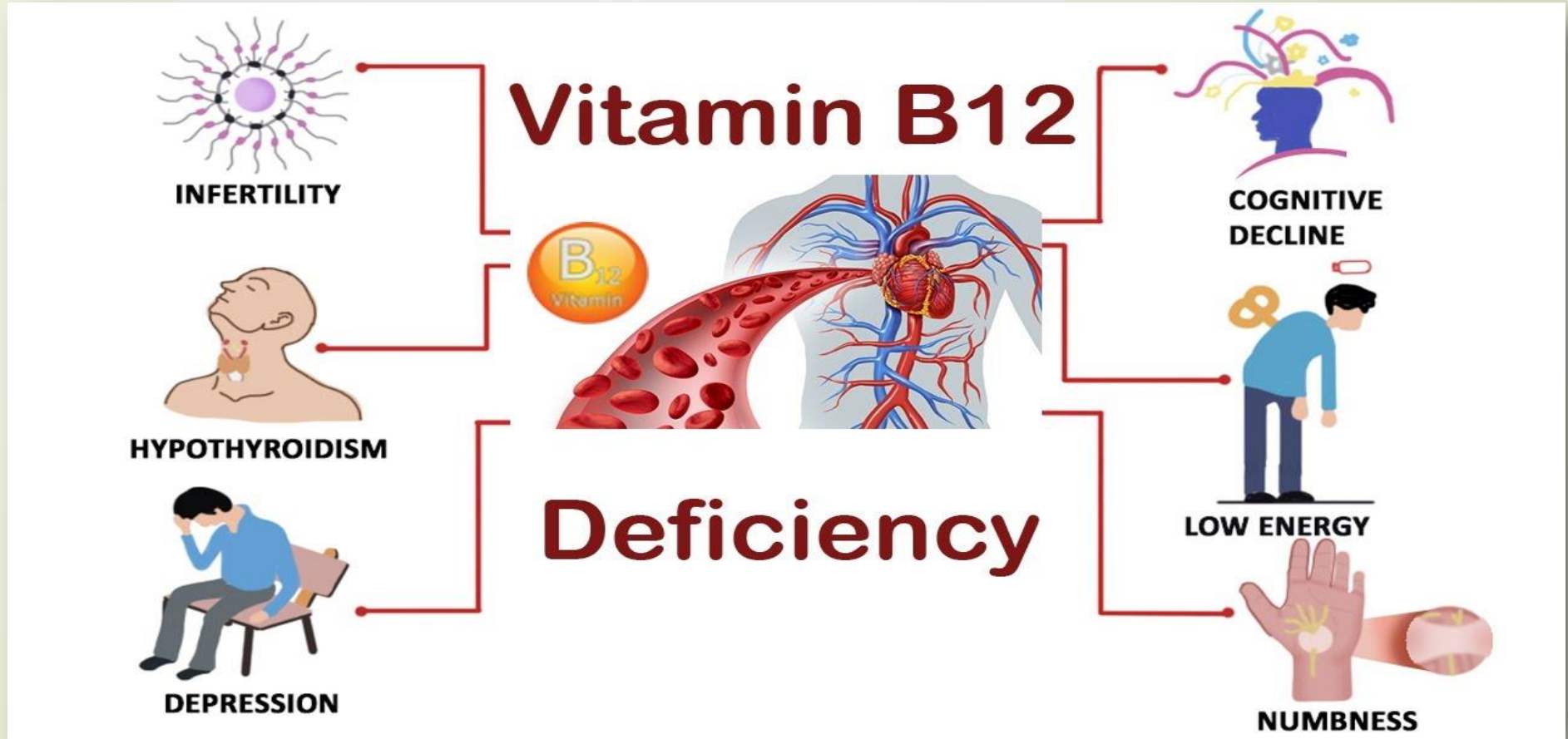
WHAT CAUSES B12 TO BE LOW?

- **Pernicious anaemia is the most common cause of vitamin B12 deficiency in the UK.**
- **Pernicious anaemia is an autoimmune condition that affects your stomach. An autoimmune condition means your immune system (the body's natural defence system that protects against illness and infection) attacks your body's healthy cells.**
- **In your stomach, vitamin B12 is combined with a protein called intrinsic factor. This mix of vitamin B12 and intrinsic factor is then absorbed into the body in part of the gut called the distal ileum.**
- **Pernicious anaemia causes your immune system to attack the cells in your stomach that produce the intrinsic factor, which means your body is unable to absorb vitamin B12.**

Absorption of B12



WHAT ARE THE SYMPTOMS OF LOW B12 LEVELS ?



WHAT BLOOD TESTS ARE NEEDED ?

FULL BLOOD COUNT (FBC)

B12 AND FOLATE



Intrinsic Factor (Blocking) Antibody. A protein that prevents B12 from binding to intrinsic factor. It is present in more than 50 percent of all patients with pernicious anaemia. A positive result confirms a diagnosis of pernicious anaemia

REMEMBER AS AN HCA IT IS THE GP/NURSE THAT DECIDES ON WHAT BLOOD TESTS ARE TAKEN-THIS WILL VARY FROM CLINICIAN TO CLINICIAN AS TO WHAT IS REQUESTED.

HOW LONG DOES A PATIENT NEED TO HAVE B12 INJECTIONS?

If the vitamin B12 deficiency isn't caused by a lack of vitamin B12 in the diet, the patient will usually need to have an injection of hydroxocobalamin every three months for the rest of their life.



FOODS THAT ARE RICH IN B12 – A CHALLENGE FOR PATIENTS WHO ARE VEGETARIAN OR VEGAN



WHAT TRAINING DO I NEED?

<https://www.mkupdate.co.uk/courses>

This is a 2 day course . It provides training on influenza and pneumococcal injections, as well as b12.

Your lead nurse needs to support you and assess your competency levels.





**DON'T
FORGET TO**

**REMEMBER
!**

- **Is this new skill in your job description.**
- **Is your medical defence organisation aware that your role has expanded ?**
- **Is there a system in place to ensure that the patient specific direction (PSD) is in place before you see the patient?**
- **Document carefully – if its not written down , it never happened !**

RESOURCES FOR YOU AND YOUR PATIENTS

<http://www.b12d.org/index>

<https://www.nhs.uk/conditions/vitamin-b12-or-folate-deficiency-anaemia/>

<https://labtestsonline.org.uk/tests/vitamin-b12-and-folate>

<https://patient.info/health/anaemia-leaflet/vitamin-b12-deficiency-and-pernicious-anaemia>

