

III OGÓLNOPOLSKA OLIMPIADA "JĘZYK ANGIELSKI W NAUKACH MEDYCZNYCH"

pod honorowym patronatem

JM Rektora

Uniwersytetu Medycznego

im. Karola Marcinkowskiego w Poznaniu

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<u>KEY</u>

PAPER 1 - LISTENING COMPREHENSION - KEY

TASK 1

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Т	F	F	F	Т	Т	F	Т	F	Т	F	Т	Т	Т	Т

TASK 2

A.

6	If your thyroid is underactive and you would like to conceive, you are advised to				
	undergo a detailed health appraisal by your family doctor so as to make sure you				
	receive the proper amount of the thyroid hormone.				
10	Nevertheless, women are advised to follow iodine-rich diet, provided with fish,				
	dairy and eggs.				
3	People who suffer from extreme lack of the thyroid hormone tend to inhabit				
	places that are distant from the coast, thus, their diet is short in iodine.				
5	It is estimated that approximately 2 in 100 people suffer from hypothyroidism.				
7	When the patient is at the end of the first trimester of pregnancy, the faulty				
	action of the thyroid may be impossible to be corrected.				
1	The lack of the thyroid hormone in pregnant women has long been linked to far-				
	reaching growth complications in children.				
	Levy thinks women should not embark on iodine-rich dietary supplements since				
	large doses of this hormone may trigger both hypo- and hyperthyroidism.				
9	Women slightly short in the thyroid hormone were administered a small dose of				
	the hormone, while the control group received no such treatment, and the				
	relationship wasn't confirmed.				
2	According to Doctor Levy, thyroxine deficiency cannot be unambiguously				
	associated with learning disturbances that children may exhibit later in life.				
8	There has been a research project whose aim was to check whether diagnosing				
	thyroid problems in pregnancy is relevant to the health of mothers and children.				
4	Almost 50% of Americans present with a slight lack of iodine.				

B. – **UWAGA!** Przy sprawdzaniu uznajemy **WYŁĄCZNIE poprawną** pisownię (0,5 punktu za poprawną odpowiedź).

- a. SUBTLE DEFICIENCIES
- b. SWEEPING CONCLUSIONS
- c. CONFOUNDING VARIABLES
- d. LANDLOCKED
- e. CAN OF WORMS

- f. LAX
- g. REPLETE
- h. KELP

TRANSCRIPTS

CHOLESTEROL-LOWERING SPREADS

Mayne

If you like they are the cholesterol of the plant world and we know that we actually have them naturally occurring in our diet, so they come in the form of grains, nuts, seeds and we consume about 400-600 milligrams of these every single day. Now we know that isn't actually sufficient to provide the cholesterol lowering benefit, so you have to have something like five to 10 times that amount which is why they've started to be put into functional foods. Normally found in the chiller cabinet and you'd be looking for Flora Proactive, which is a plant sterol and also Benecol which is a plant stanol product because both sterols and stanols are very structurally similar to cholesterol. They work primarily by reducing the absorption of cholesterol into the body from our diet but they also reduce the reabsorption of cholesterol rich bile acids. Now bile is put into the gut as part of our digestive juices, it's there to help emulsify the fat in our diet, break it down into really small globules which are then available for digestion. So it helps reduce the reabsorption of these.

Porter

What's the evidence that they lower cholesterol?

Mayne

Well there's some really good evidence from a quite significant number of clinical trials. So each – the plant stanols and the plant sterols – have about 60 clinical trials each, about half of which are in human populations. And they can show that you can lower cholesterol by between 7-10% if you're taking the required amount each day.

Porter

Can you give me some idea - if I'm using, for instance, a spread, how much of that am I having to use?

Mayne

So you need between two and three portions a day and a portion is considered to be two teaspoons of the spread, one yoghurt or a glass of the milk.

Porter

And to maintain a lower than normal cholesterol for you you'd have to keep taking these products indefinitely?

Mayne

Absolutely and that's very key because some people believe that they can take them for a period of time, they've lowered their cholesterol and they've been to the GP, their cholesterol's come down so they stop taking them.

Porter

Margaret McCartney, it sounds like there's a lot of evidence out there that these actually do lower cholesterol.

McCartney

Yes so there's lots of data that if you take these regularly for periods of time you can reduce your LDL cholesterol which is sometimes thought about being your bad cholesterol by around about 9-10%, something like that.

Porter

That's all the TV ads that I've seen claim and the implication of course is that that's good for your heart, can we make that leap?

McCartney

No we absolutely cannot. So this is what's called a proxy marker, the idea from the marketing company is for these products is that if you take these drugs and you lower your cholesterol therefore you'll reduce your risk of stroke, heart attack or early death – that's what they would like you to believe. But that's a leapfrogging of the evidence. We have evidence that they will reduce your cholesterol, what we don't have evidence for is that these drugs will reduce your cholesterol in a clinically meaningful way allowing you to live longer without having had a heart attack, stroke or an earlier death later on.

Mayne

Absolutely agree, there aren't the clinical end markers in clinical trials to show that they reduce the number of heart attacks, the number of strokes etc.

Porter

Have the studies actually been done, I'm intrigued, because often there's no evidence because the trials haven't been done or have trials been done and they've not been found to be effective?

Mayne

Trials have been done but in order to get an end point you would have to run these trials for very, very long periods of time and most of the trials are done in healthy people who are 20, 30, 40 years away from their heart attack, so they're not about to keel over if you continue the trial for six months or 12 months.

Porter

But what's your position on these products as a charity – Heart UK – because NICE, the National Institute for Health and Care Excellence, don't advise their use in people with – who are at risk of heart disease?

Mayne

Yes and very recently the European Atherosclerosis Society did actually come out and say that there are some key groups of the population that could benefit from taking plant sterols and plant stanols. And these are people that are at a. low risk or medium risk of heart attack or a stroke because they've got slightly raised cholesterol, it's also people that are at high risk and are on statins but could benefit from having the plant sterols on top of the statins and we know that they can help by almost doubling the cholesterol lowering effect of the statin and they're also people with a condition called FH, it stands for Familial Hypercholesterolemia, or family cholesterol in the blood and this is a genetic

condition that affects up to one in 500 of the population and can cause early death in people aged 20s, 30s, 40s.

THYROID AND PREGNANCY

Levy

It's been known for a long time that very severe iodine deficiency, which is now incredibly rare thankfully, and also severe thyroxine deficiency, which is now very easily treatable, it's been known that previously that was associated with quite profound developmental problems. But this is really about more subtle deficiencies in thyroid hormone levels. So I think it's an interesting study but I think it's very difficult to make sweeping conclusions because only one particular area which was subtle defect in maths in children was found, which I think you can't really across the board say any sweeping conclusions.

Porter

The implication from the headlines of course was that if you're not very good at maths that there is some sort of global impairment of a child's development but what you're saying is we don't know that?

Levy

Yeah I think that's right. This adds to the jigsaw of evidence but I think it's very difficult to make too many sweeping statements. These sorts of studies are fraught with epidemiological problems, in other words there may be confounding variables, such as the social factors, parental IQ, genetic factors, many things other than thyroxine and iodine, which might be making a false association. Severe iodine deficiency is very, very rare and it occurs now in landlocked countries that are well away from the sea, so iodine tends to come from the sea, so you get it in the food from things like fish, oily fish, also it's present in dairy products. There probably is a surprisingly high amount of very mild iodine deficiency. There was a study in the US that showed as much as nearly half the population was subtly deficient in iodine. But severe deficiency is very, very rare. So that's in terms of iodine. In terms of thyroid disease itself, having an underactive thyroid gland is actually relatively common, about 1-2% of the population will have an underactive thyroid gland. So if you're someone that is on thyroxine the best thing to do is plan in advance, like all things in life, so if you are planning to become pregnant the best thing to do is go and see your GP, get a blood test and make sure you're on enough thyroxine, so a typical dose would be something like 100 micrograms of thyroxine. And the important thing is once you know you're pregnant and once you've had your scan often you're already about 10 or 12 weeks and that could be too late.

Porter

What about the implications for other women who may not know that they're iodine deficient, they don't have a diagnosed thyroid problem, should we go looking for trouble?

Levy

Well this is a bit of a can of worms and in fact one of my colleagues from Cardiff, John Lazarus, did a very ambitious study really looking at 20,000 women to see whether screening thyroid disease in pregnancy made a difference. So he looked at a large number of women and they measured blood tests in the first trimester and those were the subtle deficiencies, they gave half of them thyroxine and the other half they were a little more lax with the treatment, it would have been standard care. But

they found that there was absolutely no difference in IQ whilst the baby had reached three years of age, so their conclusion at that stage was, from their results, there was no advantage of screening pregnant women. However, and most pregnant women just to want to make sure they've got the wind going in the right direction and got everything optimised as possible, it makes perfect sense to me to make sure that you are iodine replete, in other words you've got plenty of iodine in the diet. So my suggestion to any pregnant woman is not to worry about this but make sure that your diet is adequate in fish, in dairy products such as yoghurt, milk, eggs, interestingly organic milk seems to have less iodine than non-organic milk, probably because the way - the agricultural or farming side of it. But just make sure that you've got an iodine sufficient diet and that should be plenty to make sure there are no problems during pregnancy. I would advise against taking high iodine content over-the-counter preparations, for example some people something called kelp, which is something that has a very high content of iodine from brown seaweed and too much of a good thing can cause problems, so very high doses of iodine can actually trigger an overactive or an underactive thyroid. So I think like all things in life be sensible but make sure that your diet is adequate in iodine, just as there are many other minerals it's important to be adequate in before pregnancy.

PAPER 2 - READING COMPREHENSION – KEY

READING ONE

TASK 1

- 1. NG 2. F 3. T 4. T 5. F 6. F 7. T 8. F 9. NG 10. T TASK 2 1. a 2. c
 - 3. d
 - 4. a
 - 5. c

READING TWO

KEV

KL I				
1C	7A	13A	19A	25 B
2D	8B	14B	20C	
3D	9C	15C	21D	
4A	10D	16C	22A	
5C	11C	17B	23C	
6B	12A	18B	24D	

Suggested model letter

Honey Potts 178 Elm Street Dawn Town 378, Kentucky USA

12 February 2015

FLEXI_JOINT_PHARM Human Resources Department HR Manager Crystal Ball 26 New Bond St London W1S 1DG England

Dear Ms Ball,

I am writing to enquire if you have any vacancies in your company. I enclose my CV for your information.

As you can see, so far I have had extensive work experience in pharmaceutical environments, the retail sector and service industries, giving me varied skills and the ability to work with many different types of people. I believe I could fit easily into your team.

I am a conscientious person who works hard and pays attention to detail. I am flexible, quick to pick up new skills and eager to learn from others. I also have lots of ideas and enthusiasm. I am keen to work for a company with a great reputation.

I have excellent references and would be delighted to discuss any possible vacancy with you at your convenience. In case you do not have any suitable openings at the moment, I would be grateful if you would keep my CV on file for any future possibilities. I would appreciate a prompt reply.

Yours sincerely

Honey Potts

Encl. CV