**Text 9**

**Exercise 1. *Make adverbs from the following adjectives according to the model and* *translate them.***

Adjective + ly

current (текущий) – currently (в настоящее время),

human (человеческий) – humanly (по-человечески),

painstaking (тщательный) – painstakingly (тщательно),

fanciful (причудливый) – fancifully (причудливо),

active (активный) – actively (активно),

new (новый) – newly (по-новому).

**Exercise 2**. ***Read and translate the collocations***.

Life expectancy – ожидаемая продолжительность жизни,

the rise would tail off – подъем утихнет,

to reach the limit – достигнуть предела,

human longevity – человеческое долголетие,

the only way – единственный путь,

genetic engineering – генная инженерия,

we could conquer death – мы могли победить смерть,

to slow the process – замедлить процесс,

limited priority – ограниченный приоритет,

long-term maintenance – долгосрочное техобслуживание.

**THE QUEST FOR IMMORTALITY**

Scientific breakthroughs mean that life expectancy continues to rise every year. But the medical advances which now make it possible to contemplate (ожидать) living to a very great age – if not forever – also raise (поднять) profound (глубокий) practical and ethical issues.

Over (за) the past century, life expectancy in developed countries has risen at an astonishing (удивительный) rate (темп, скорость). In Britain, for example, the average mail (ошибка, наверное male - мужской) lifespan (продолжительность жизни) went up (расти) from 48 in 1901 to 75 in 2000. (During the same time, the female lifespan rose from 49 to 80.) Scientists have always imagined (представлять, воображать) that this rise would tail off, but that does not seem to be happening. Since 1840, people born in any year have, on average, lived three months longer than those born the previous year – a consistent (стойкий) increase that still holds true today. A paper (статья) published in *Science* magazine has warned (предупреждать) that, at the current rate, female life expectancy in developed countries could be as high as 101 by 2070.

We are lasting (длительный) so much longer mainly because of better nutrition, better housing, vaccination programmes and a dramatic (резкий) reduction in infant mortality due (в связи) to advances (достижениям) in both pre-natal and post-natal care (уход). Since there is only limited potential for further (в дальнейшем) advances in these areas, some scientists think we have almost reached the limit of human longevity. Dr Jay Olshansky, of the university of Chicago, for example, believes that the only way of adding to life expectancy now is to make old people live longer – a painstaking (тщательный) process that will be measured in weeks or months, not years. The real challenge now facing biologists is to learn how to delay (отсрочить) the ageing process.

So immortality is a realistic prospect (перспектива) not for the foreseeable (предвидимый) future. The gerontologist, Professor Tom Kirkwood firmly (твердо) quashed (подавлять, отменять) the notion (представление) that genetic engineering might result in some kind of “fountain of youth”. Considering (учитывая) how frustratingly (раздражающе) slow the battles against cancer, heart disease (заболевание) and strokes (паралич) have been, he said it is fanciful (странно) to imagine that we could conquer death. On the other hand, (С другой стороны) scientists do now understand more about why we age, and what can be done to slow the process. “Our ancestral (наследственный) genes placed limited priority on long-term maintenance and repair,” sais Kirkwood. “Ageing comes about through the gradual (постепенный) build-up (наращивание) of unprepared faults (ошибки) in the cells (клетка) and tissues (ткани) of our bodies, not as the result of some active mechanism for death and destruction.” The trick (трюк), then, is to help the body repair the damage done by wear and tear (износ).

That can be done in many different ways, some of which are already pretty commonplace (обыденный). Organ transplants from pigs and monkeys are now old news – the American politician Jess Helms has just had a ten-year-old pig valve (клапан) in his heart replaced. Laser eye surgery (хирургия) has become so commonplace that Americans can now get it in shopping malls. Doctors have succeeded (добиться успеха) in wiring computerized implants directly to nerve fibres, allowing the deaf (глухой) to hear, and there is hope that electrodes planted in the brain may soon offer hope (дать надежду) for the blind (слепой) to see. But the real potential at the moment lies in the field of stem (стволовой) cells – special cells that allow lizards (ящерица) to grow new tails and humans to grow new skin over minor cuts (за незначительное время). If scientists can learn how to control these cells, they could be used to regenerate parts of the body that are failing.

Notes:

breakthrough крупное достижение, открытие

lifespan продолжительность жизни

(pre/post)natal относящийся к рождению

longevity долголетие, долгожительство

painstaking (process) кропотливый, тщательный процесс

ageing (=aging) старение

foreseeable (future) поддающийся предвидению

gerontology геронтология, учение о старости

quash подавлять, сокрушать

stroke решающий довод, удар, приём, ход

to age стареть

ancestral (genes) наследственный, родовой

wear and tear (of life) жизненные передряги

valve клапан (сердца)

stem cells стволовые клетки

***Task 1. Read the text again to decide which of the statements below a) possibly true, b) definitely true or c) unlikely (вряд-ли):***

1) People in the UK are living much longer than they used to. – definitely true

2) It will be common for women to live to over 100 in the year 2070. – possibly true

3) Infant mortality will continue to fall sharply. – unlikely for developed countries, possibly true in developing countries

4) Life expectancy will not carry on rising as dramatically as in the past. – possibly true

5) One day we may be able to live forever. – possibly true

6) Scientists understand much more about the ageing process nowadays. – definitely true

7) Replacing body parts is now a common operation. - unlikely

8) There will be a cure for (излечить) blindness in the future. – possibly true

***Task 2. Give your viewpoint on the following topics.***

1. How long are we living now?

In our country average lifespan is 68 years.

1. Why are we lasting so much longer?

better nutrition, better housing, vaccination programmes and a dramatic reduction in infant mortality due

1. Is immortality a realistic prospect? How that can be done?