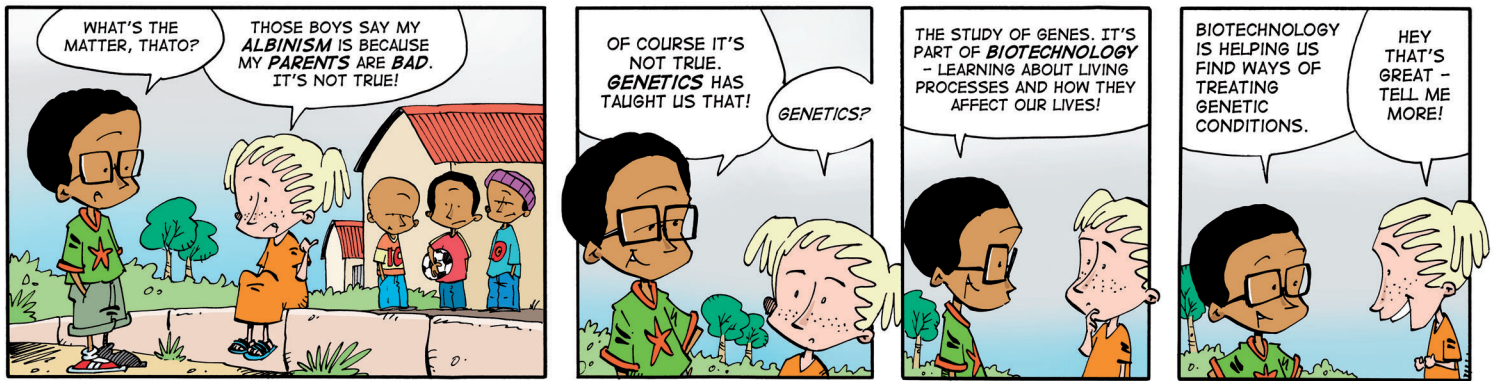


BIOTECHNOLOGY

GENETIC CONDITIONS



GENES AND INHERITANCE

- 1 WHEN OUR BODIES WERE BUILT - THERE WAS A SET OF INSTRUCTIONS (OR GENES) FOR EACH PART.
- 2 SINCE WE RECEIVED GENES FROM BOTH PARENTS - OUR BODIES CHOSE WHICH ONES TO USE. I HAVE MY MOTHER'S EARS, BUT MY FATHER'S NOSE!
- 3 SOMETIMES THE INSTRUCTIONS GET MIXED UP! EACH OF US CARRIES ABOUT 5 FAULTY GENES, BUT OUR BODIES ARE USUALLY PROTECTED FROM THESE FAULTY GENES. (BY USING A HEALTHY GENE FROM THE OTHER PARENT).

WHEN OUR GENES ARE PASSED TO OUR CHILDREN, SOMETIMES A FAULTY GENE DOES GET USED TO BUILD THE BABY. THEN THE CHILD IS BORN WITH A GENETIC CONDITION.
- 4 WHEN PARENTS ARE CLOSELY RELATED (SUCH AS COUSINS) THERE IS MUCH MORE CHANCE OF BOTH PARENTS GIVING A CHILD THE SAME FAULTY GENE.

GENETIC TESTING CAN HELP PARENTS PREDICT A GENETIC CONDITION. FOR MORE INFORMATION CONTACT THE NATIONAL HEALTH LABORATORY SERVICES (011) 386 6000.

GENETIC CONDITIONS

ALBINISM

ALBINISM ONLY OCCURS WHEN BOTH PARENTS PASS A GENE FOR ALBINISM TO A CHILD.

PEOPLE WITH ALBINISM MUST TAKE CARE NOT TO GET DAMAGED BY THE SUN (WEAR HATS, LONG SLEEVES, A GOOD SUNSCREEN AND DARK GLASSES TO PROTECT YOUR EYES).

THERE ARE ABOUT 10 000 PEOPLE LIVING WITH ALBINISM IN SOUTH AFRICA. FOR SUPPORT WITH ALBINISM SPEAK TO: ALBINISM SA - (011) 838 6529

NEURAL TUBE DEFECTS

SOMETIMES BABIES ARE BORN WITH PART OF THE SPINE NOT COVERED WITH SKIN AND BONE. ALL PREGNANT WOMEN SHOULD EAT LOTS OF FOLIC ACID (CONTAINED IN GREEN LEAFY VEGETABLES) WHICH HELPS THE GENES BUILD THE SPINE CORRECTLY.

YOU CAN ALSO GET FOLIC ACID FROM A CLINIC OR PHARMACY.

DOWN SYNDROME

DOWN SYNDROME (A FORM OF MENTAL RETARDATION) CAN OCCUR WHEN PARENT PASSES ON AN EXTRA SET OF GENES (CHROMOSOME) TO THE CHILD. THIS EXTRA SET OF GENES CAUSES PROBLEMS AS THE CHILD DEVELOPS.

THE CHANCE OF HAVING A CHILD WITH DOWN SYNDROME INCREASES AS THE PARENTS GET OLDER.

TALK TO DOWN SYNDROME SOUTH AFRICA FOR SUPPORT: 0861 369 672

CLEFT LIP AND PALATE

SOMETIMES CHILDREN ARE BORN WITH A SPLIT IN THEIR TOP LIP AND PALATE. THIS CONDITION CAN BE FIXED BY A SURGEON (A SPECIAL DOCTOR).

REMEMBER - NO ONE IS TO BLAME AND HELP IS AVAILABLE. DON'T BE AFRAID TO TALK ABOUT THESE THINGS.

SPEAK TO A DOCTOR OR CONTACT: (011) 646 5508