Biotechnology Applications and Benefits

Winemakers can protect their vineyards from diseases with GM grapes

> Personalised treatments, ____ via the use of predictive biomarkers, support the identification of the safest and most effective treatment for patients, often preventing illnesses from occurring

Enzymes clean clothes and dishes at lower temperatures than chemical detergents, saving energy

> Genetically modified ____ (GM) Canola oil is a versatile and healthy oil for everyday cooking

Orphan Medicinal Products (OMPs) provide often the only treatment for diseases that are rare, chronicle and life-threatening

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Enzymes tailored to the needs

of the textile industry, by

applying biotechnology,

in the development of

materials such as jeans.

can improve the production

methods and fabric finishing

Biotechnology can convert agricultural waste into renewable energy or biofuels for cleaner and more efficient transport, which will give a new income to farmers

> Many Europeans wear biotech cotton shirts everyday

Modern biotech medicines help Multiple Sclerosis patients recover a high level of mobility

European farmers rely on biotech animal feed to tend to their livestock

Enzymes can help reduce the amount of bleaching needed for paper production and also remove inks from paper to be recycled

> Enzymes speed up fermentation in beer

By combining a medical device and a therapeutic product, new healthcare technologies increase the convenience of treatment for diabetes

> Although we do not always realise it, biotechnology is a huge part of our everyday lives, from the clothes we wear and how we wash them, the food we eat and the sources it comes from, the medicine we use to keep us healthy and even the fuel we use to take us where we need to go.



Tissue engineering Through biotech tissue engineering replacing or repairing defective tissue is possible.

_ Vaccines

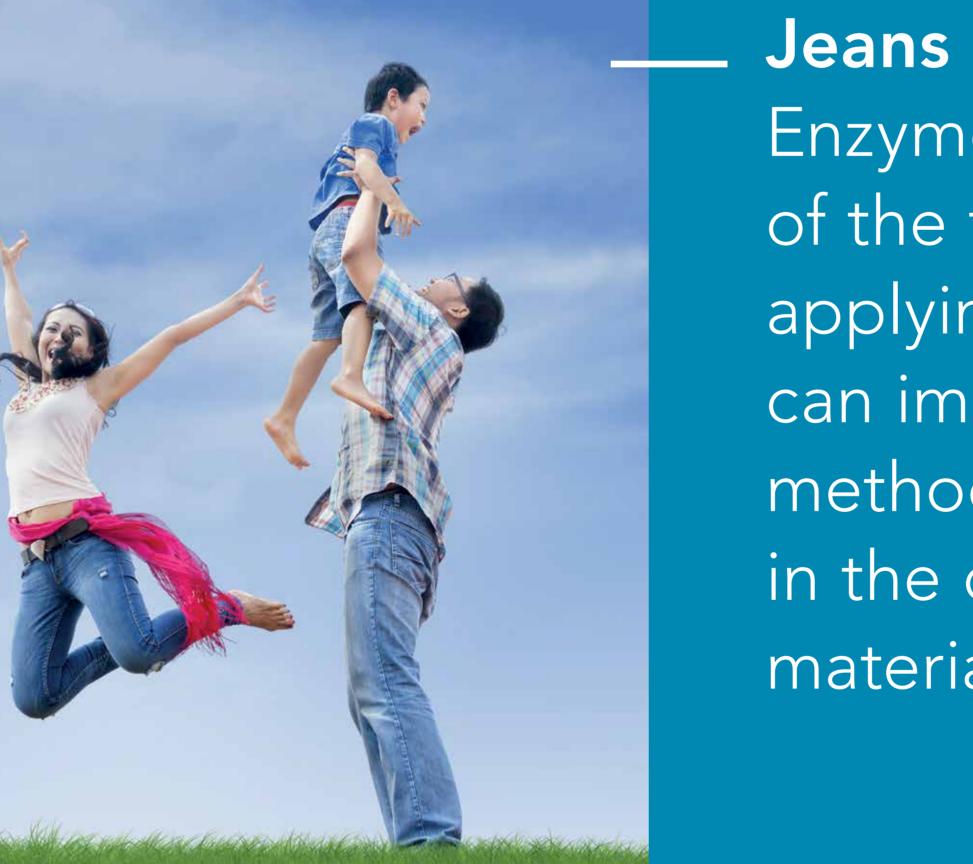
Biotech to the rescue: vaccines to prevent diseases such as Human Papilloma Virus, polio and many other diseases have been developed thanks to biotechnology.



Bioplastic Biotechnology makes biodegradable and plastics possible.



compostable plant-based



Cotton

Through biotech the genes coding for Bt were inserted into the cotton's DNA so that the plant can defend itself against pests, remain healthy and be harvested.



stomachs and a biotech enzyme has been tailored to allow bread to stay fresh and soft for longer.



