




The Science of the GHK-Cu Peptide

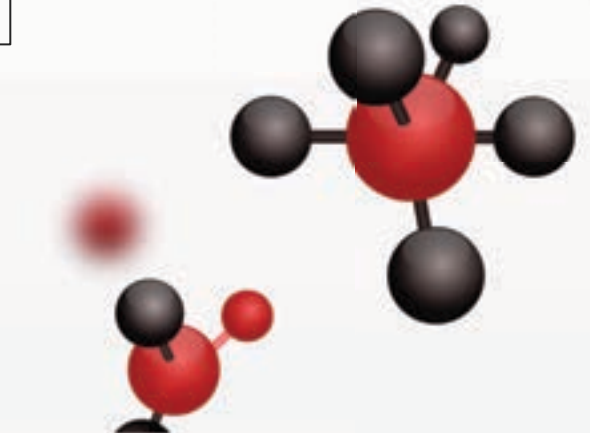
Dr Jon Harmon | Lifewave Executive Director




Lifewave obtained a patent in May of 2020 on the x39 technology because it was shown to elevate the GHK-CU peptide in the blood!

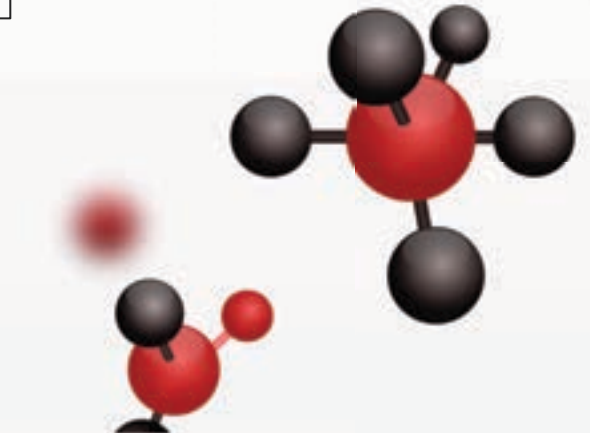


**Lifewave had to prove to the
US patent office that using
the x39 patch increased the
GHK-Cu peptide in the
bloodstream!**






Lifewave cannot and does not claim that our x39 patch does all of this healing mentioned in these slides.

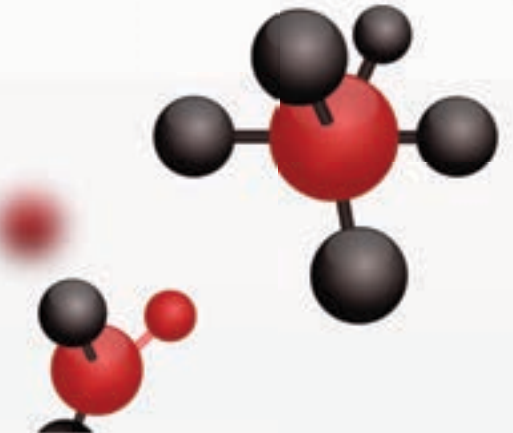




If one can increase the amount of GHK-Cu peptide in the bloodstream, all kinds of beneficial things happen!

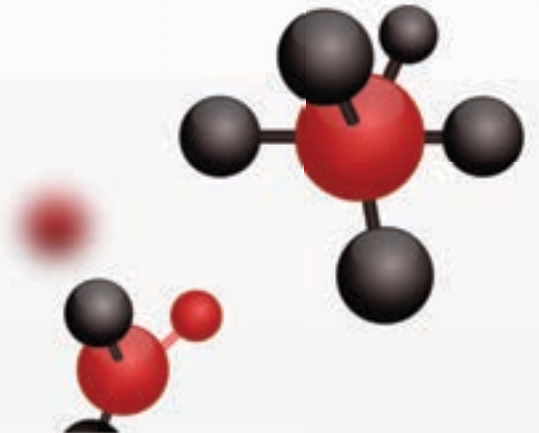
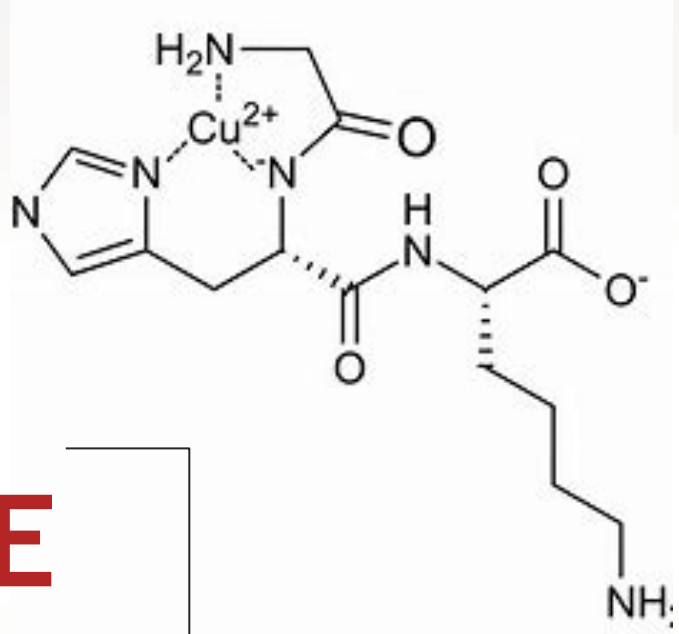


The effects of the GHK-Cu peptide in the body have been well researched, documented and established over the last 40-50 years!



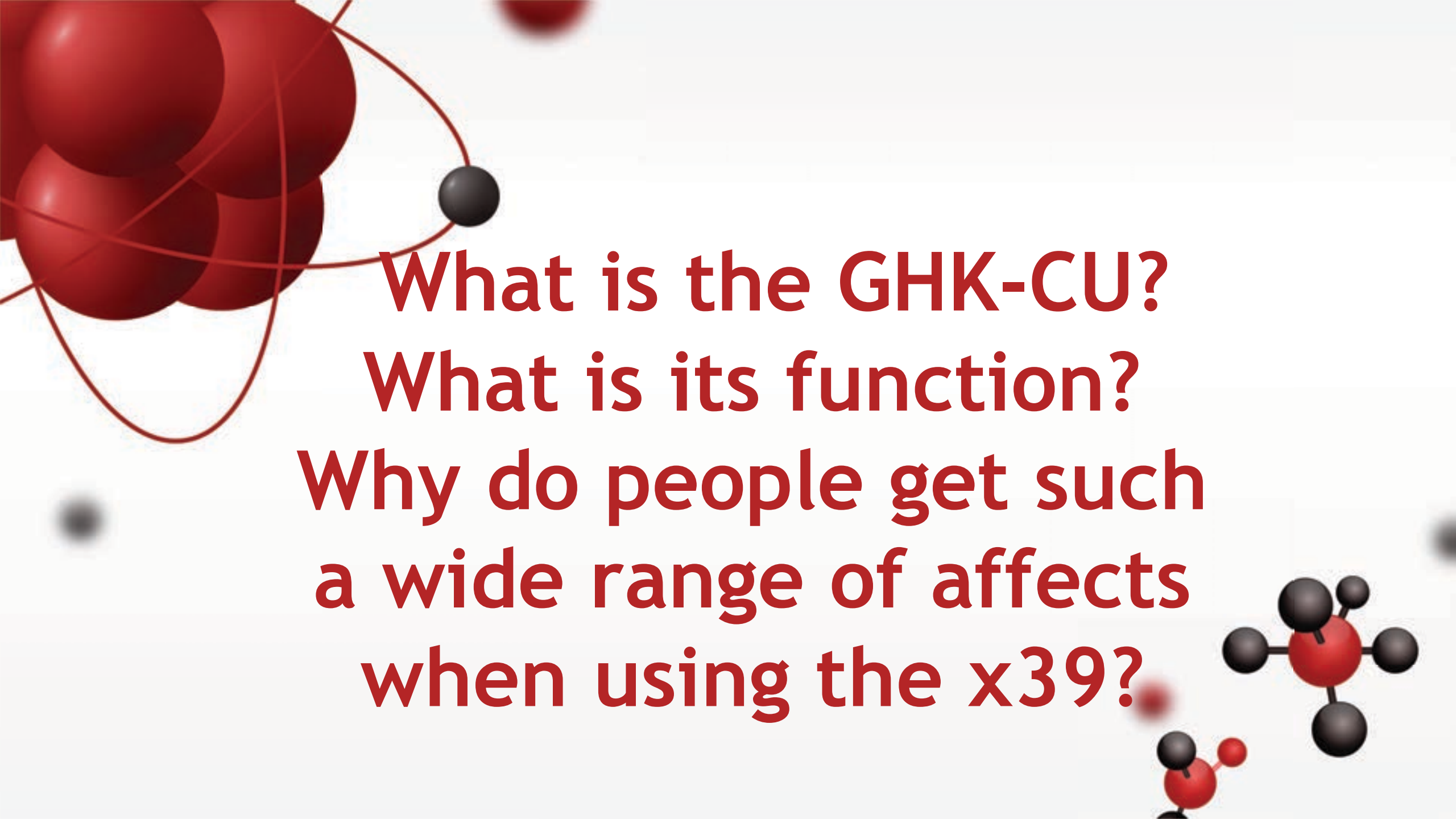


**GHK-CU PEPTIDE
THE ANTI-AGING
BREAKTHROUGH!**





**Questions to
answer in the
presentation?**


The background features a large red atom on the left with a black electron orbiting it. On the right, there is a molecular structure with a central red sphere and several black spheres. The text is centered in a bold red font.

**What is the GHK-CU?
What is its function?
Why do people get such
a wide range of affects
when using the x39?**

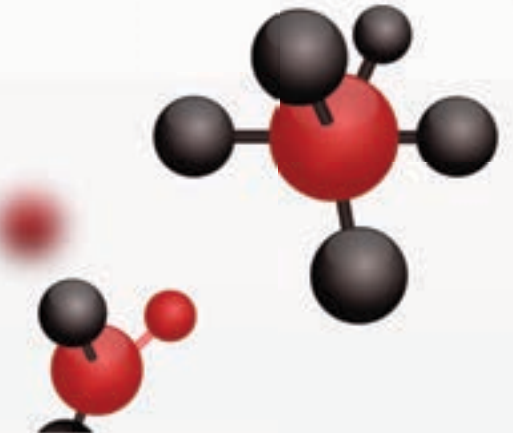



**JUST AS A PIANO MUST BE PERIODICALLY FINE -
TUNED TO MAINTAIN MELODIC BALANCE,
STUDIES SUGGEST THAT GHK-CU PEPTIDE
TUNES GENE EXPRESSION TO A YOUNGER,
HEALTHIER STATE!**



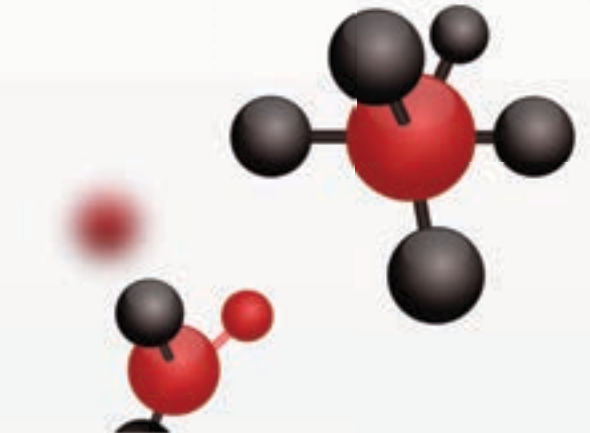


GHK-Cu, also known as copper tripeptide, is a short chain of amino acids that naturally occurs in the body.



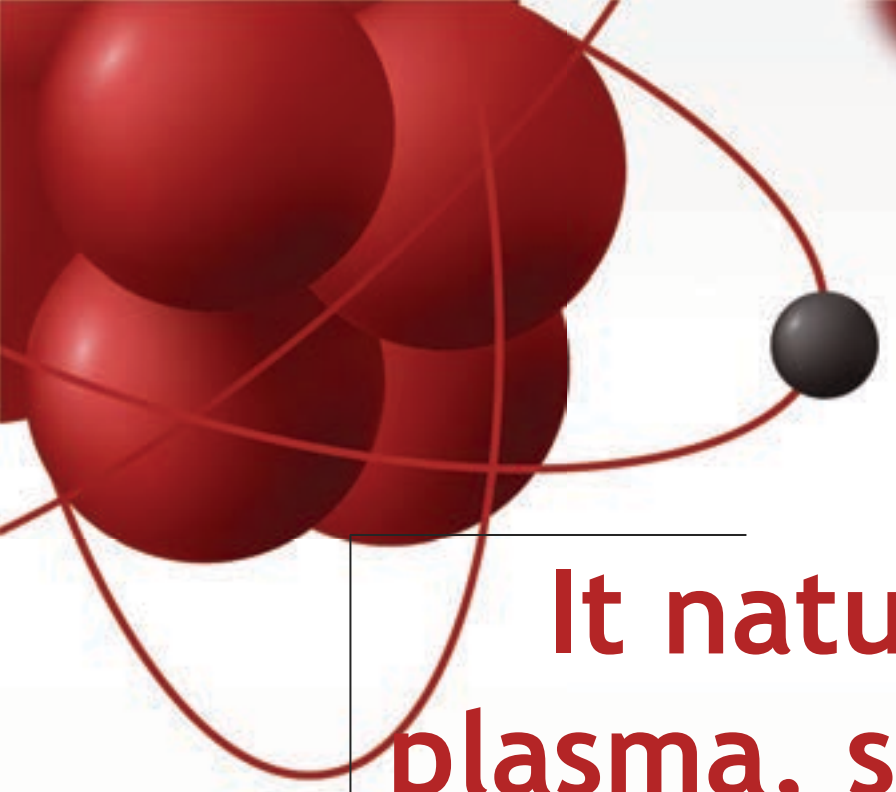


GHK-Cu was isolated in 1973 by Dr Loren Pickart. The first thing he observed was that it caused older liver tissue to synthesize proteins like younger tissue.

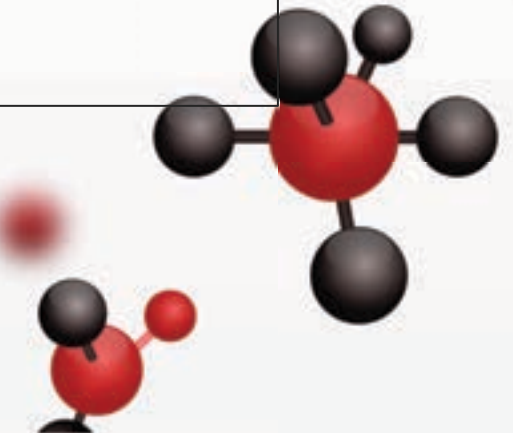



The image features a large, stylized red atom on the left side, with a black electron orbiting it. On the right side, there is a ball-and-stick molecular model with a central red sphere and several black spheres. The background is white with faint, blurred red and black spheres.

The more scientists looked into this wonder peptide, the more they came to understand its specific, yet unusual, properties.

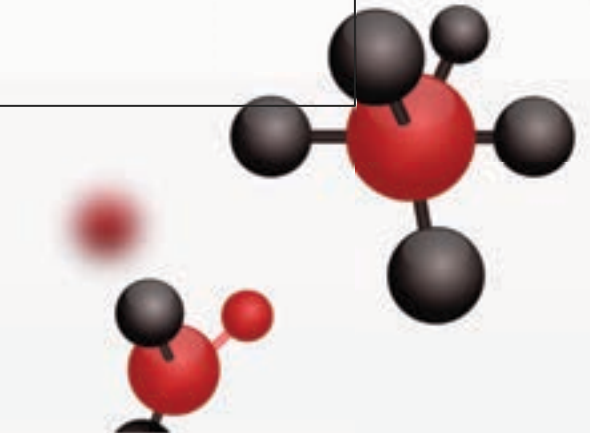


It naturally occurs in human plasma, saliva, and urine. Plasma levels of GHK decline 60% by the age of 60 years!





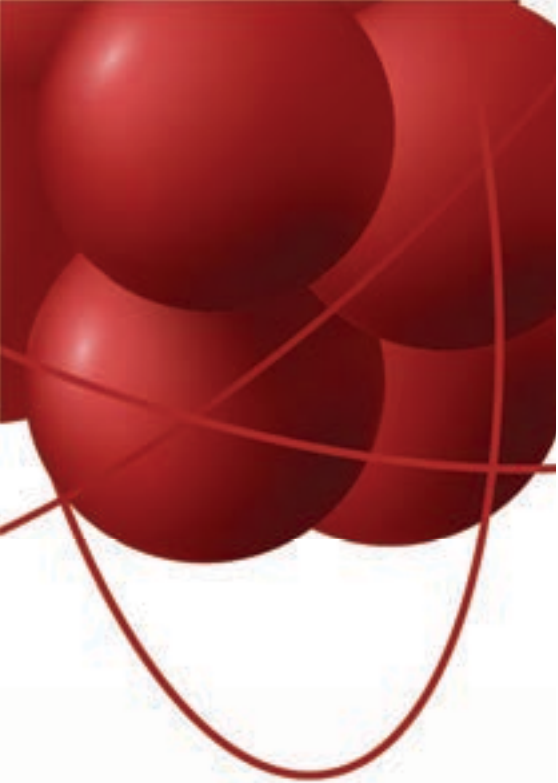
**GHK-Cu has been proven to exhibit
antioxidant, anti-inflammatory,
regenerative, and wound healing
actions**



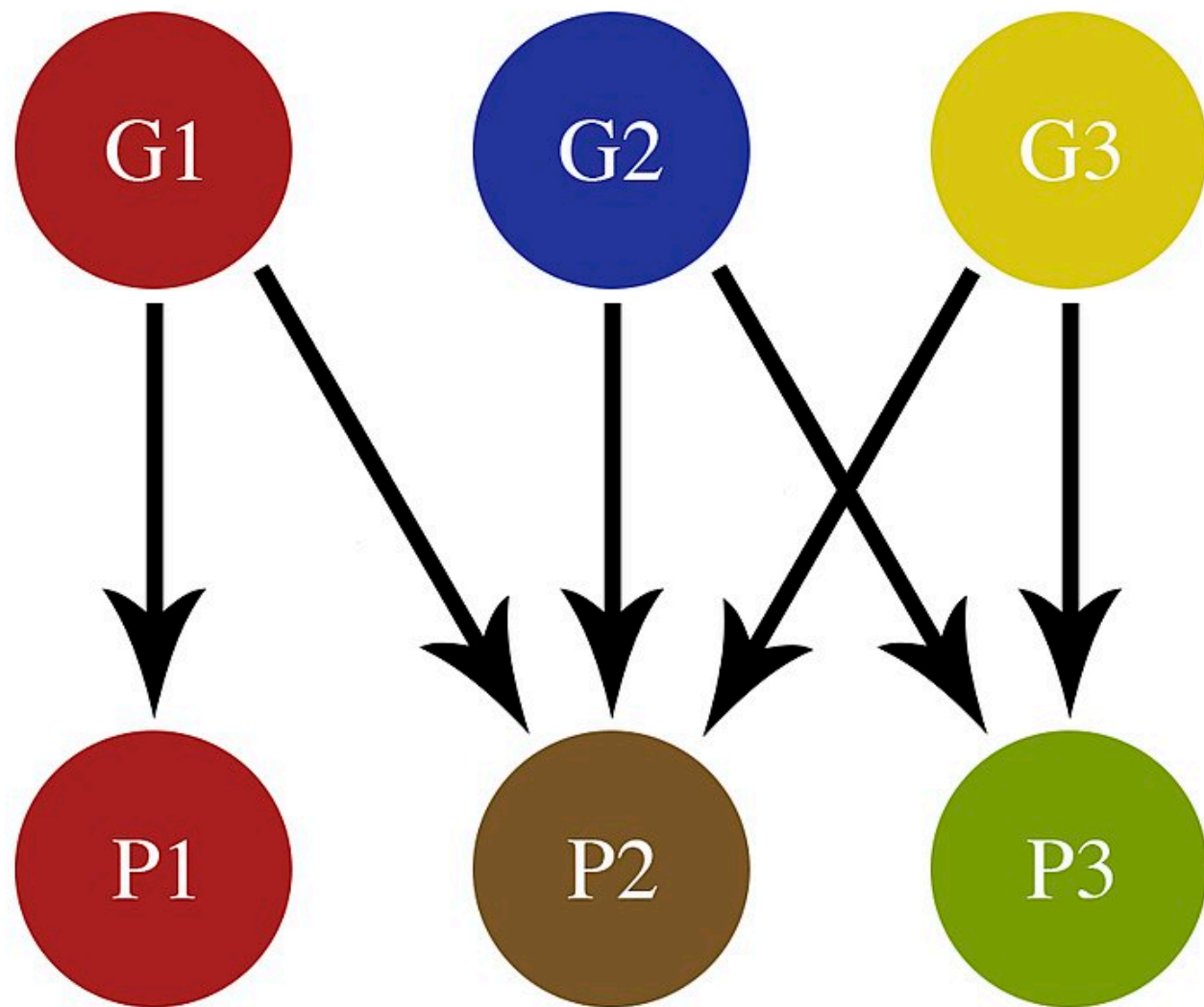


**Upregulate?
Downregulate?
Pleiotropic?**

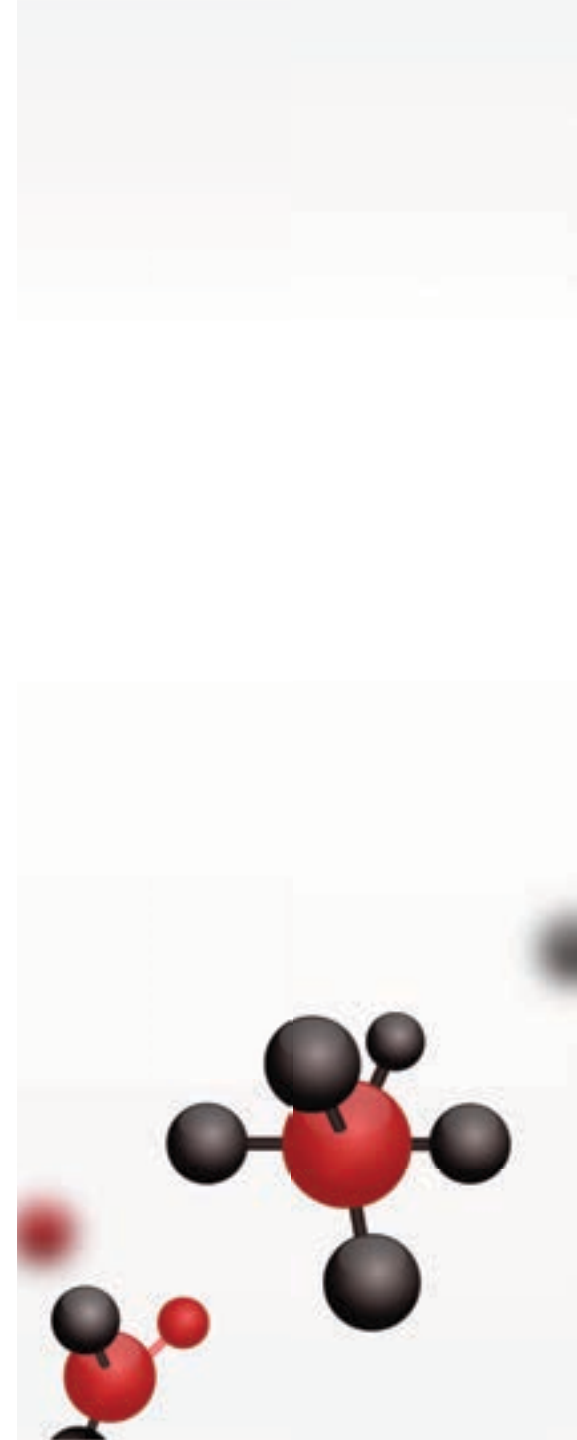




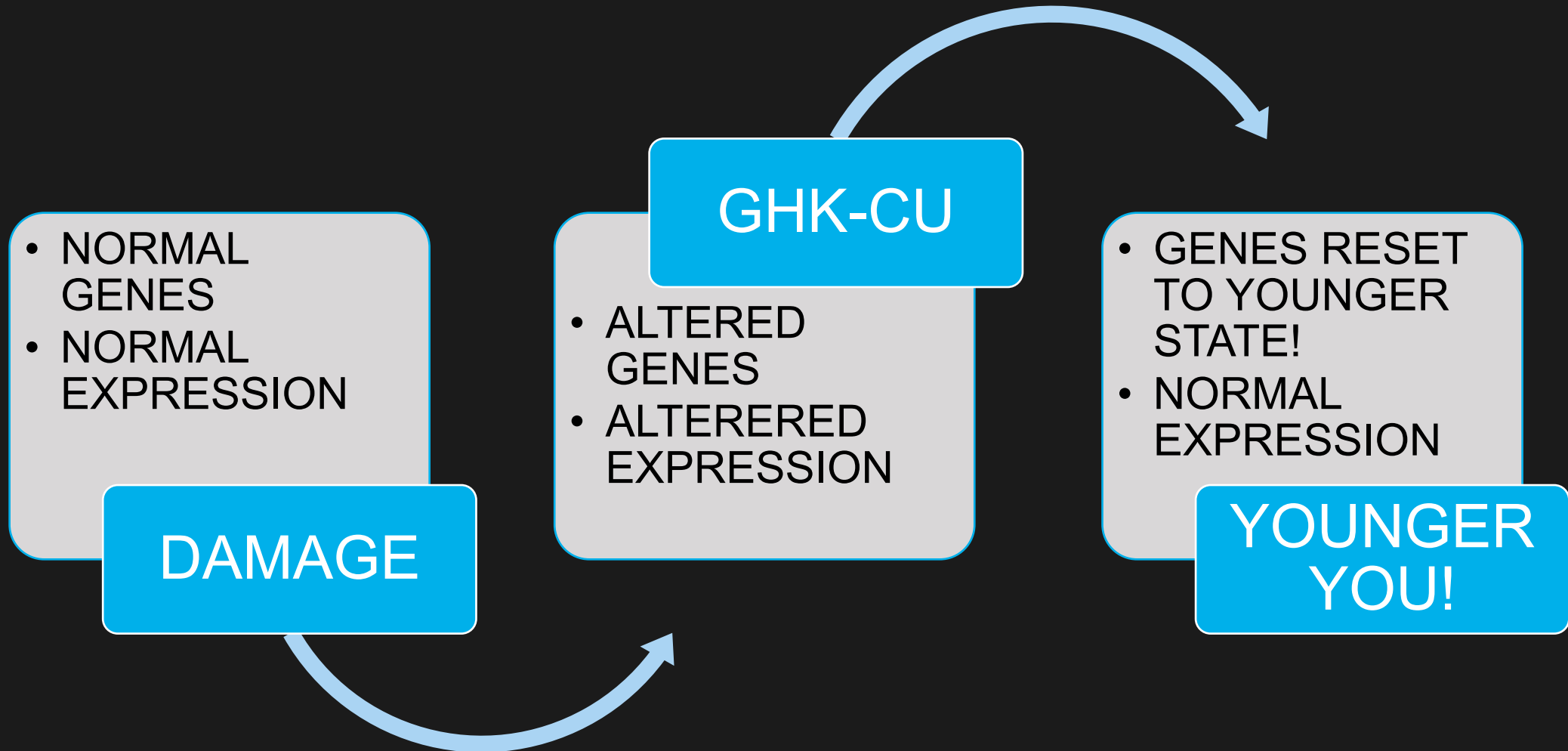
GENOTYPE

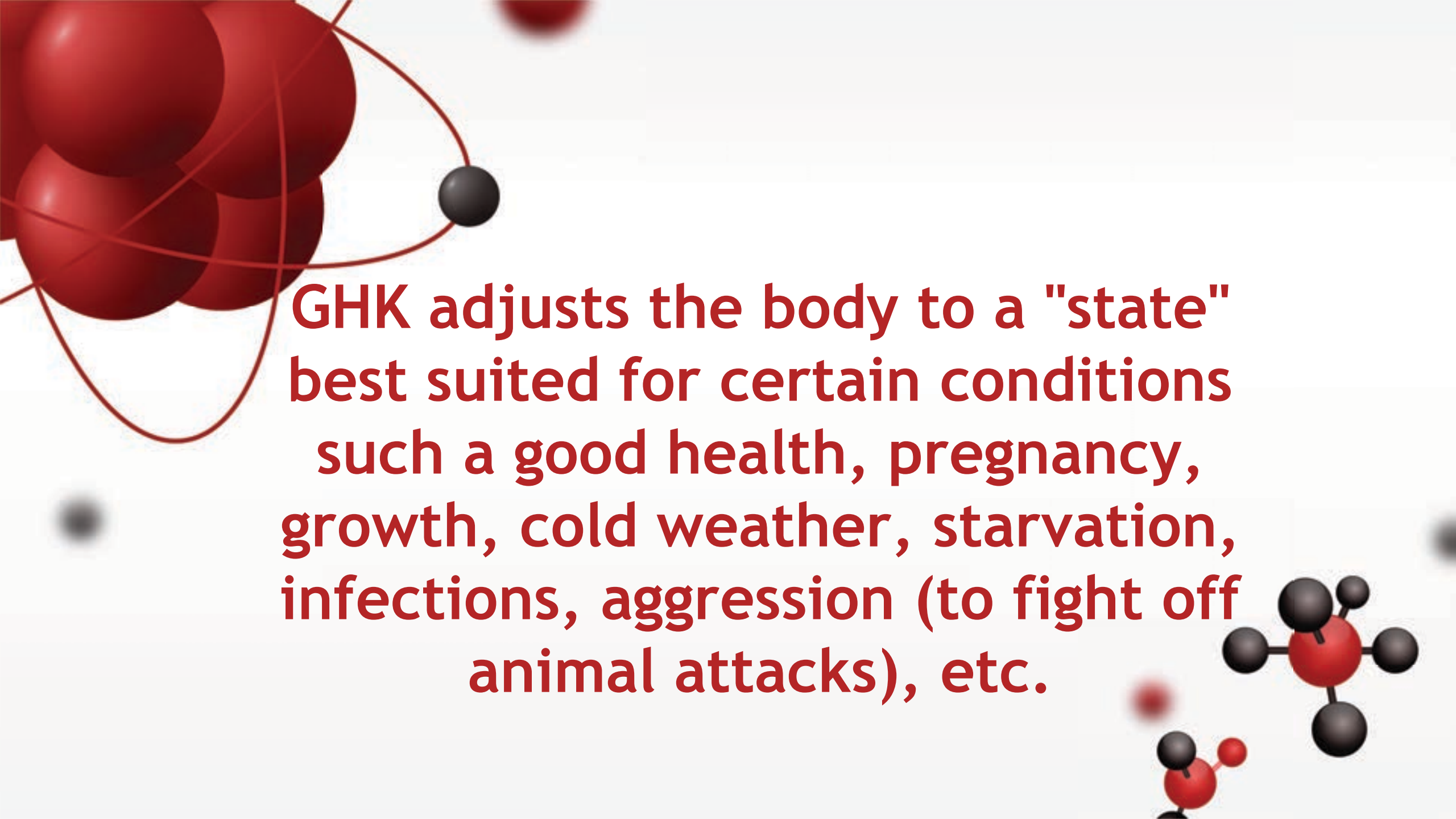


PHENOTYPE

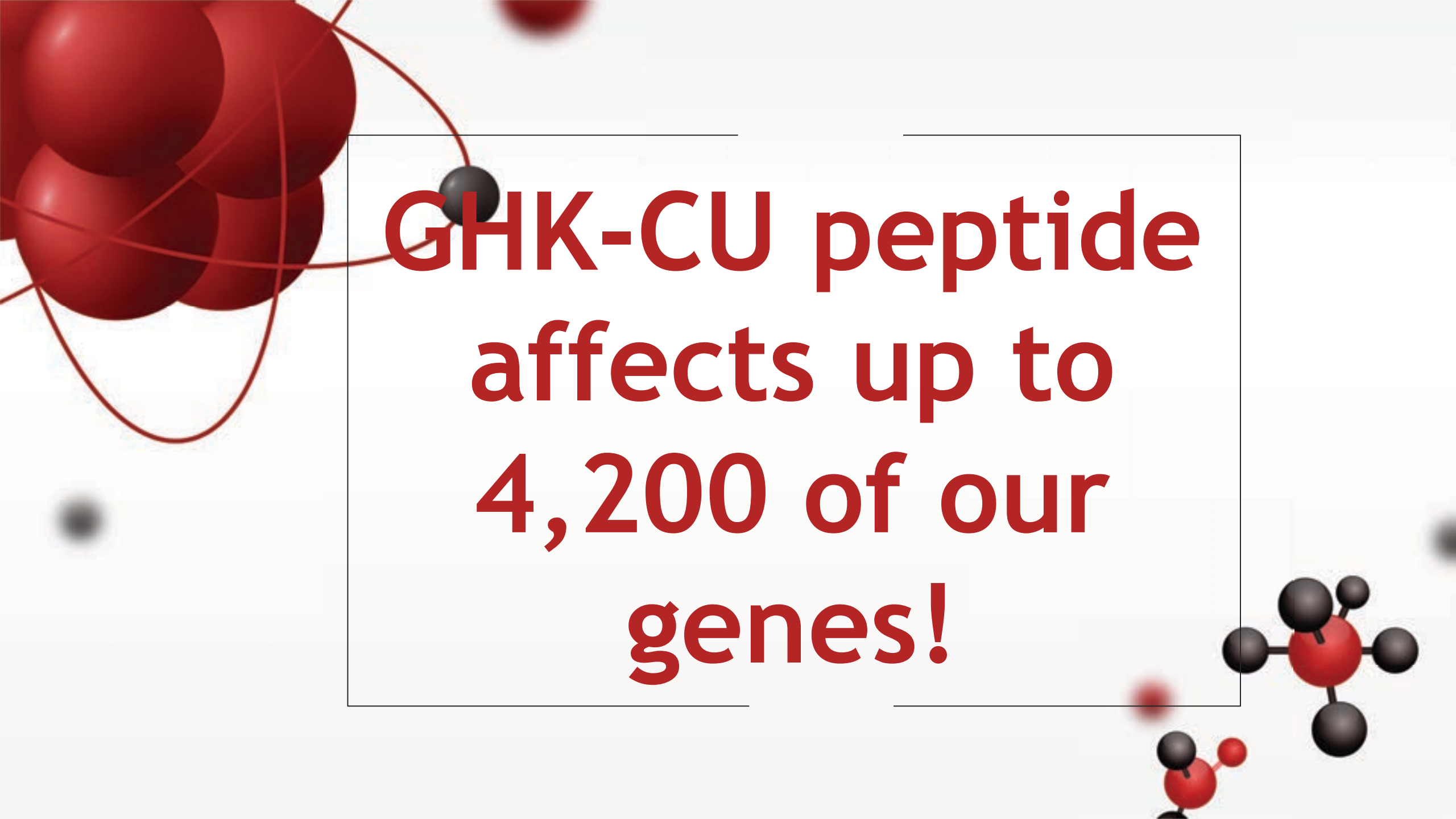


AFFECTS ON GENES






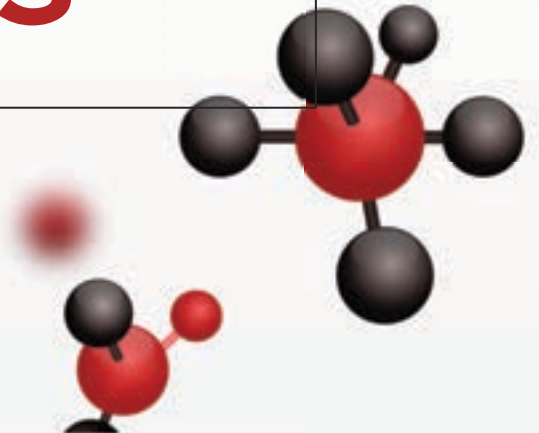
GHK adjusts the body to a "state" best suited for certain conditions such a good health, pregnancy, growth, cold weather, starvation, infections, aggression (to fight off animal attacks), etc.

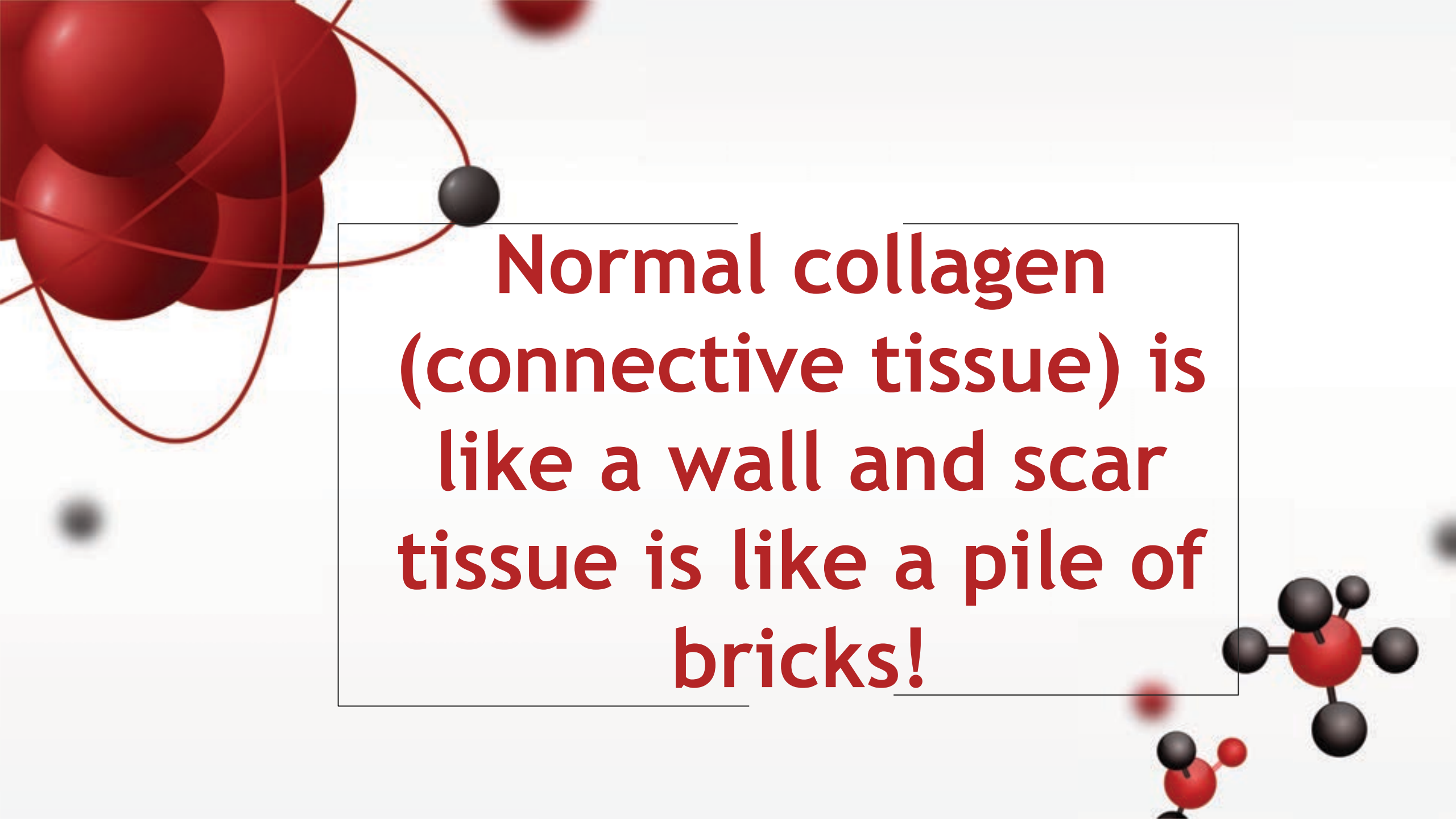


**GHK-CU peptide
affects up to
4,200 of our
genes!**




**Stimulates both
synthesis and
breakdown of collagen**

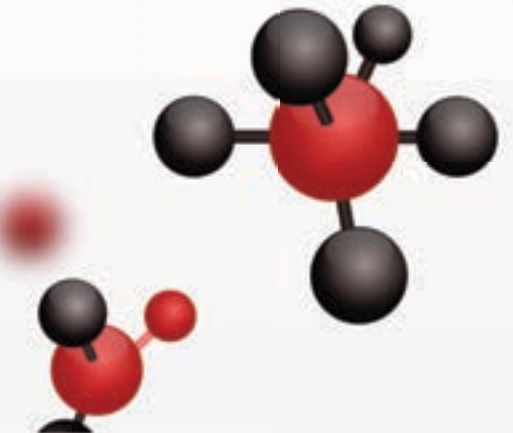


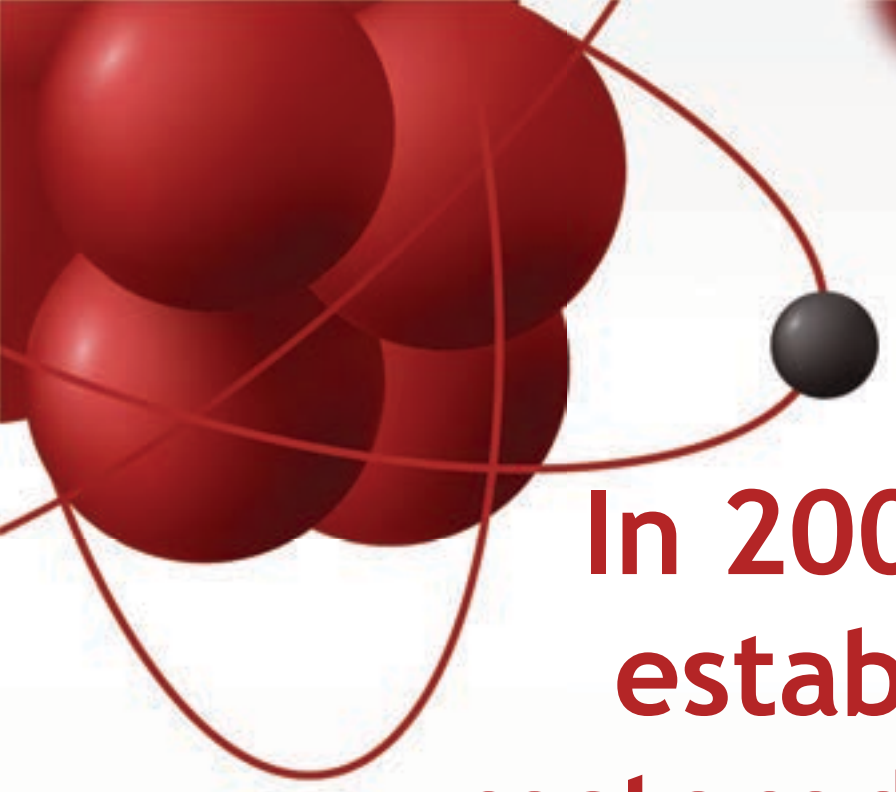


**Normal collagen
(connective tissue) is
like a wall and scar
tissue is like a pile of
bricks!**

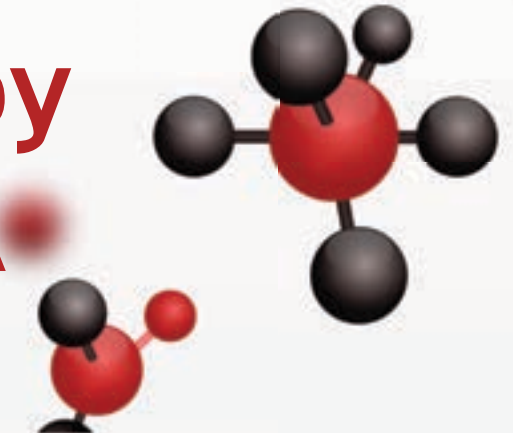



GHK-Cu accelerates wound healing and increases blood vessel formation and the level of antioxidant enzymes



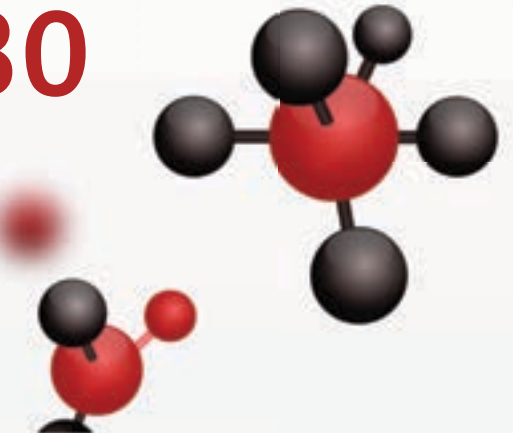


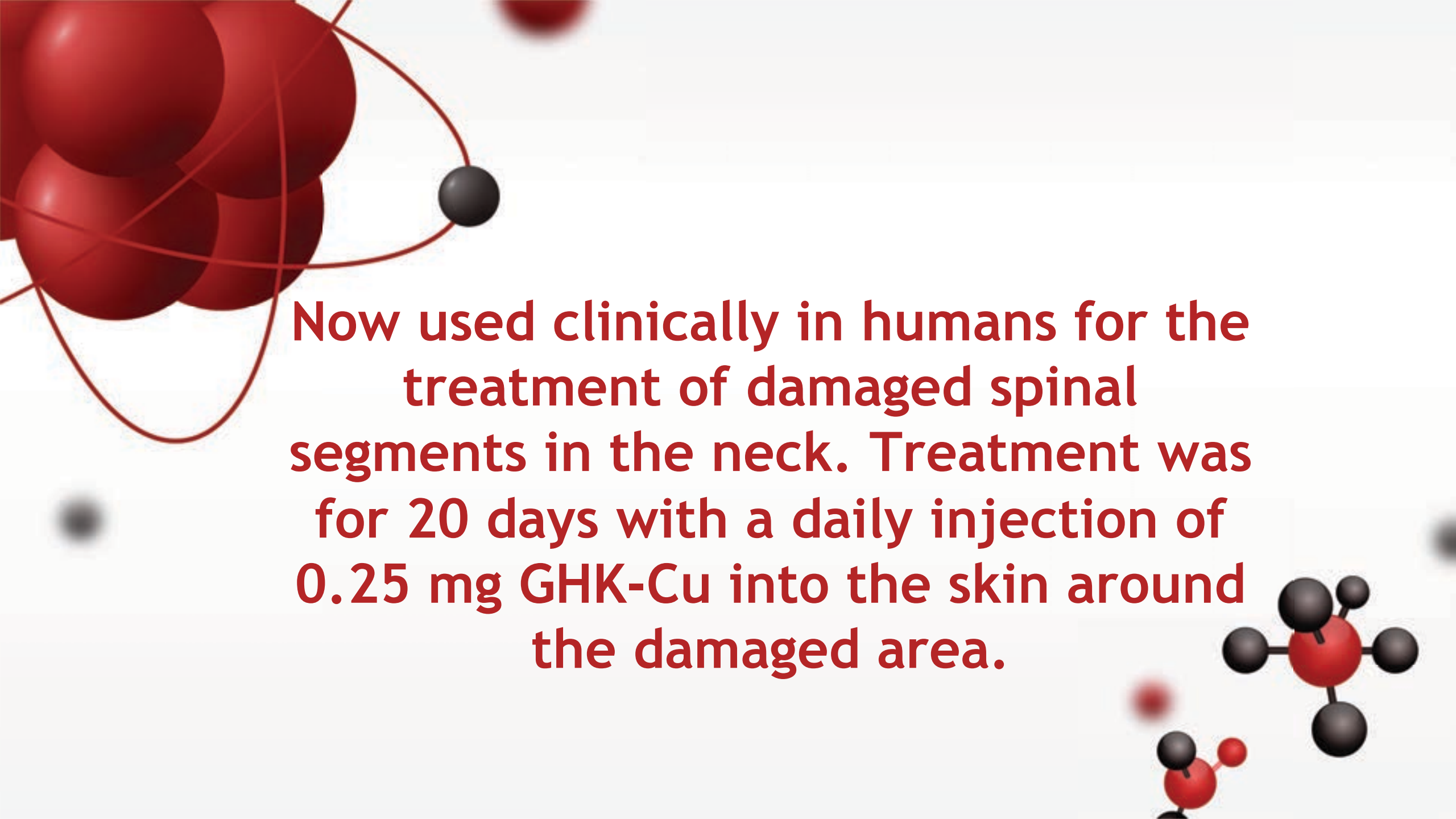
In 2001 McCormack et al. established that GHK-Cu restored replicative vitality to fibroblasts from patients after anticancer radiation therapy that damages cellular DNA






**Altered expression of human
genes important in NEURON
FUNCTION by 50%, plus or
minus, with 408 UP and 230
DOWN**

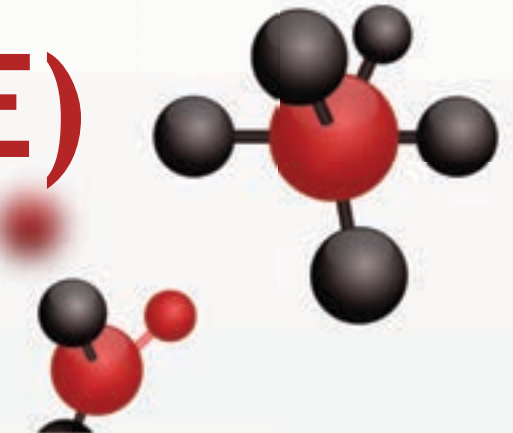


The image features several decorative molecular models. In the top left, there is a large, complex structure with multiple red spheres and a black sphere connected by thin red lines. In the bottom right, there are two smaller, simpler molecular models, one with a red sphere and two black spheres, and another with a red sphere and three black spheres. The background is white with a subtle grid pattern.

Now used clinically in humans for the treatment of damaged spinal segments in the neck. Treatment was for 20 days with a daily injection of 0.25 mg GHK-Cu into the skin around the damaged area.

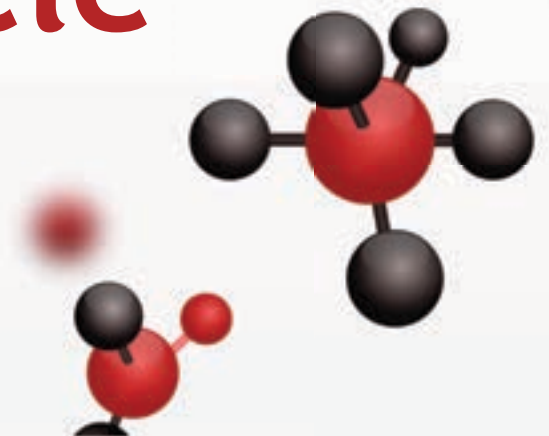
A decorative atomic model in the top-left corner, featuring a central nucleus of red spheres and a single black electron orbiting on a red elliptical path.

**Increased the healing of
many tissues (SKIN,
STOMACH, INTESTINE
LINING, BONE TISSUE)**

Two ball-and-stick molecular models in the bottom-right corner. The larger one has a central red sphere bonded to five black spheres. The smaller one has a central red sphere bonded to two black spheres and one red sphere.

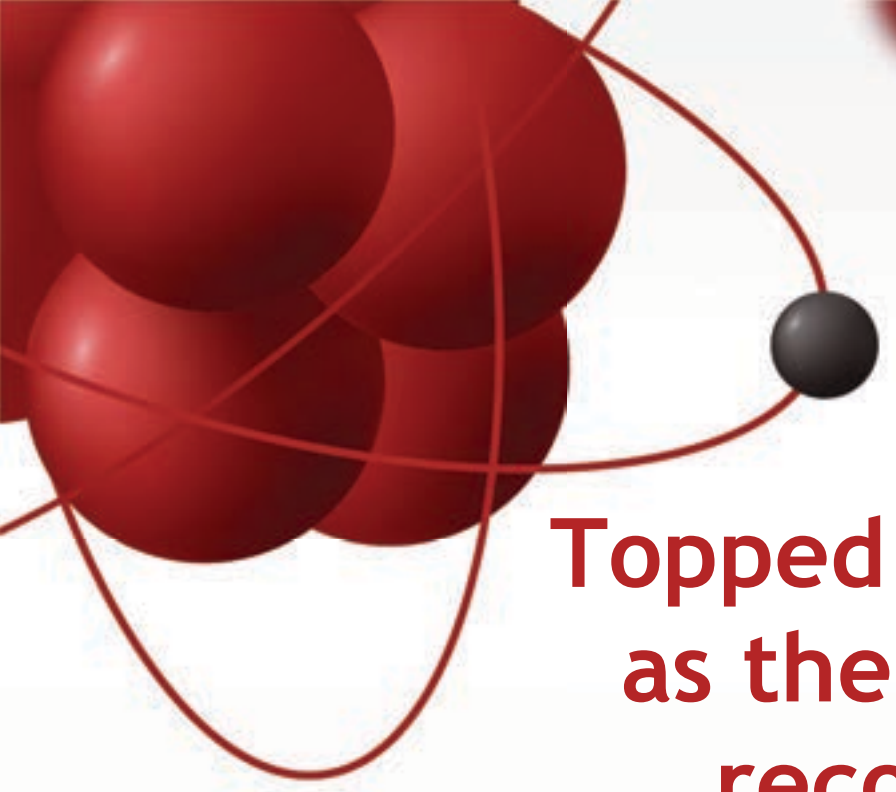


**Increased hair growth
and thickness,
enlarged hair follicle
size**

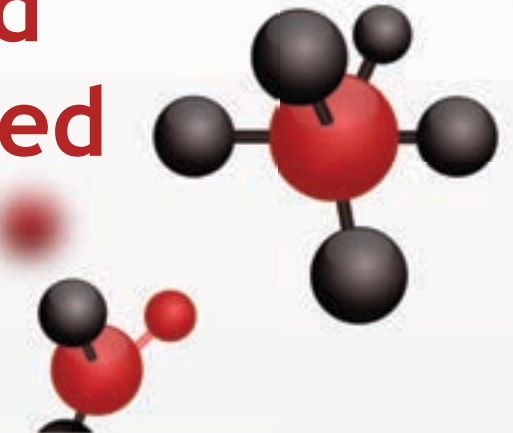


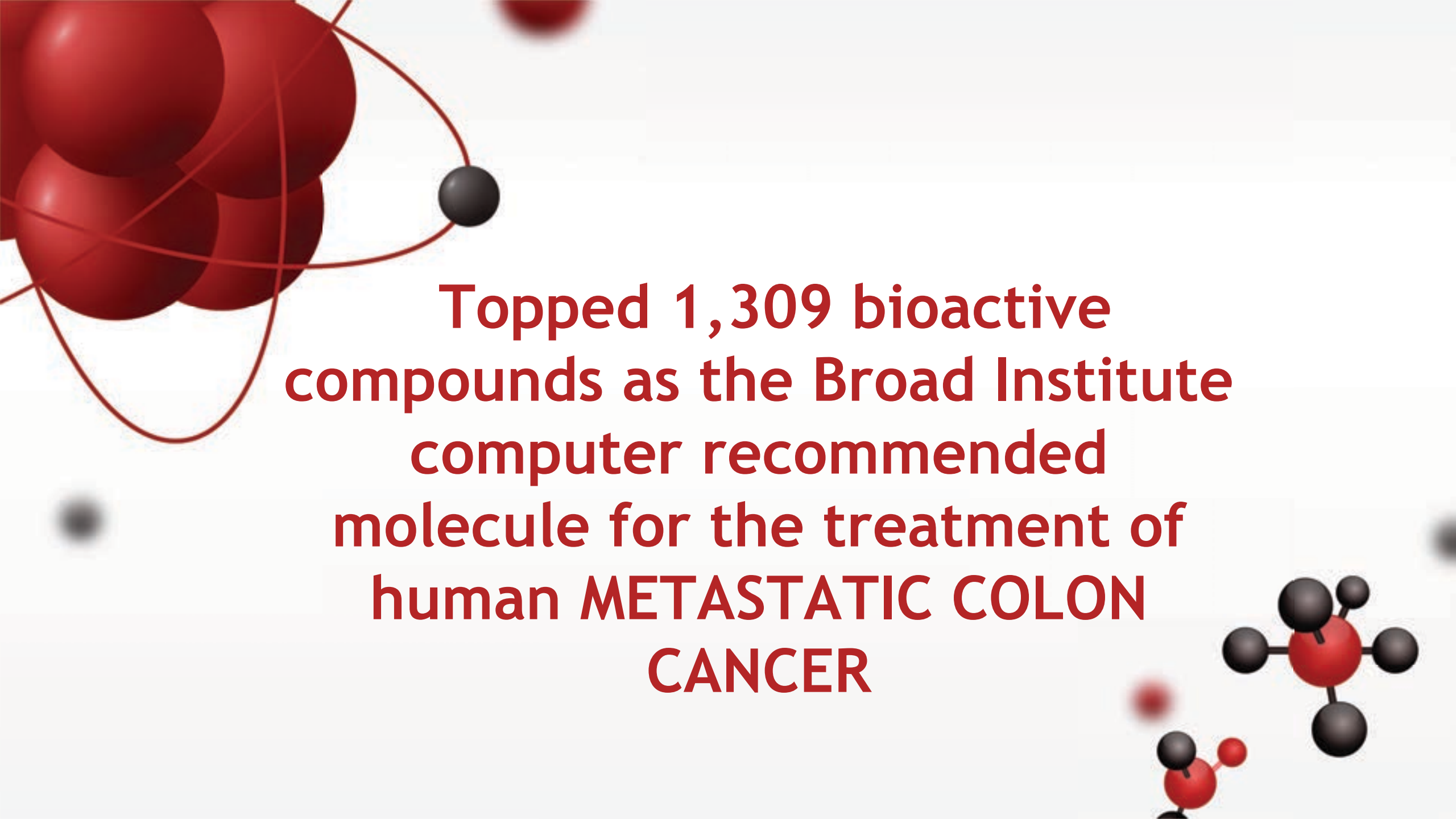
The image features several decorative molecular models. In the top-left corner, there is a large, complex structure with multiple red spheres and a black sphere connected by thin red lines. In the bottom-right corner, there are two smaller molecular models: one with a central red sphere and four black spheres, and another with a central red sphere and two black spheres. The background is white with faint horizontal lines.

**Reduced FIBRINOGEN
synthesis. Fibrinogen levels
are the top predictor of
cardiovascular/heart
disease**




**Topped 1,309 bioactive compounds
as the Broad Institute computer
recommended molecule for
treatment of CHRONIC OBSTRUCTIVE
PULMONARY DISEASE. Restored
healthy function in COPD affected
cells**




The image features a white background with several molecular models. In the top-left corner, there is a large, complex model with multiple red spheres and a black sphere connected by thin red lines. In the bottom-right corner, there are two smaller ball-and-stick models: one with a central red sphere and four black spheres, and another with a central red sphere and two black spheres. The text is centered in the middle of the page in a bold, red, sans-serif font.

**Topped 1,309 bioactive
compounds as the Broad Institute
computer recommended
molecule for the treatment of
human METASTATIC COLON
CANCER**



Reset the PROGRAMMED CELL DEATH (Apoptosis) system in human cancer cells (human neuroblastoma, leukemia, and breast cancer) but did not affect healthy cells



APOPTOSIS

Programmed cellular death!
50-70 BILLION Cells are
destroyed and replaced daily!




**GHK inhibited NFκB
p65 which is believed
to promote cancer
growth!**

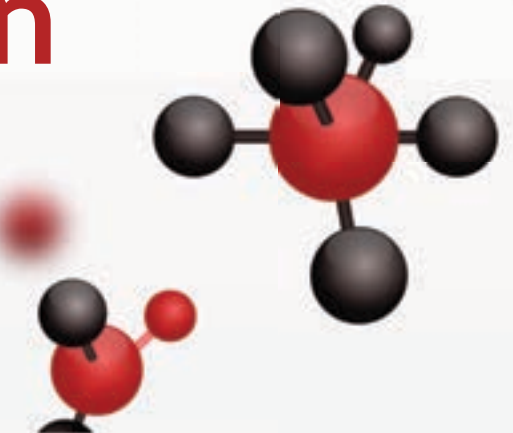





**Reset 84 genes to
growth inhibition or
cancer inhibition**

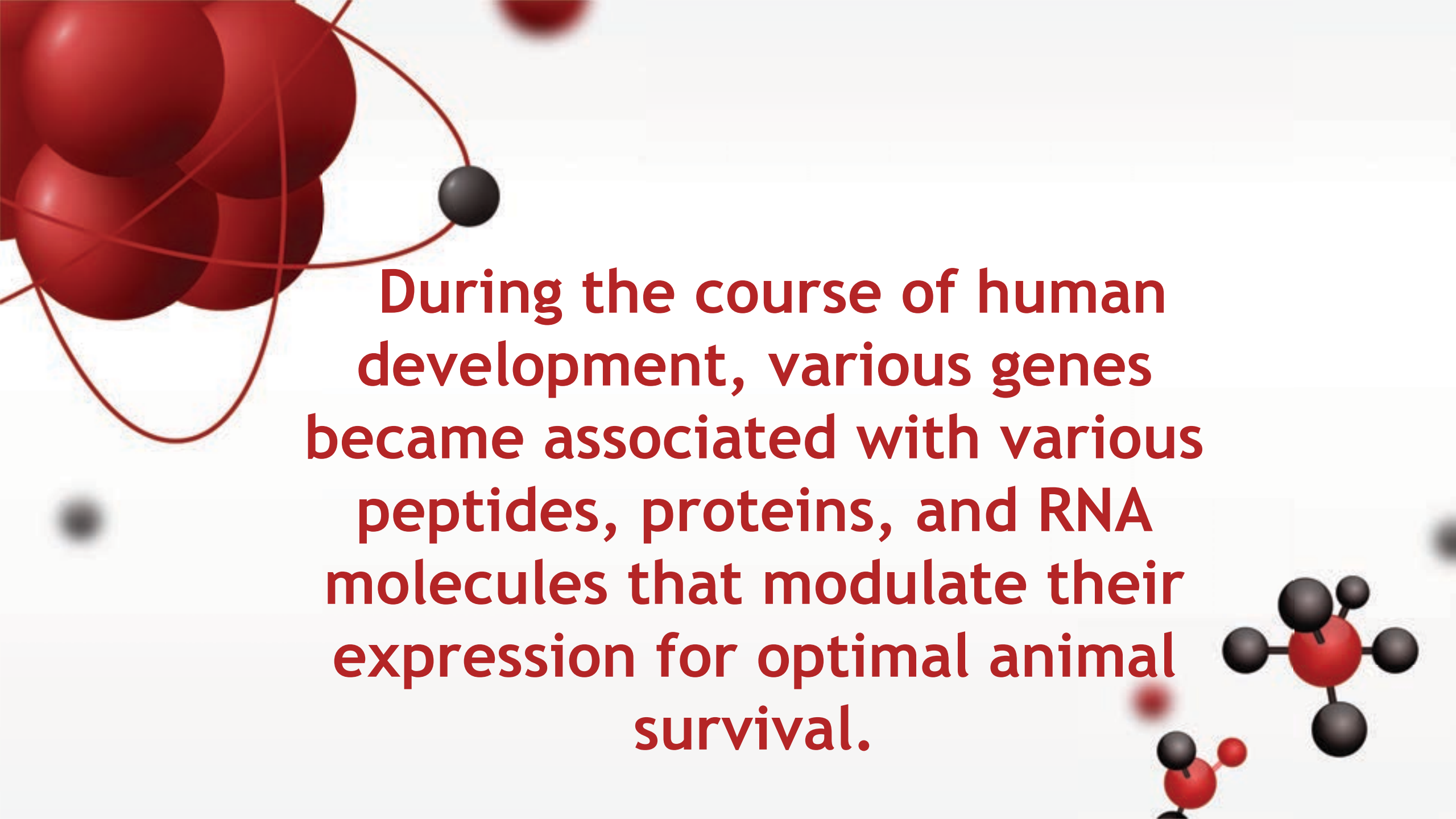


**Caused adult MCS STEM
CELLS to produce more
growth factors, increased
stem cell differentiation**



The image features a large red atom with a black electron on the left side. On the right side, there is a molecular structure with a central red sphere and several black spheres. The background is white with a light gray grid.

How can GHK have such diverse actions such as healing, anti-cancer, anti-anxiety, COPD cell repair, etc?



During the course of human development, various genes became associated with various peptides, proteins, and RNA molecules that modulate their expression for optimal animal survival.



Turn your genes to a younger state! With the x39 stem cell activating patch!