

A CLOSER LOOK AT ACHONDROPLASIA

Uncover more about achondroplasia, including how it occurs and its impact on bone growth and overall health.

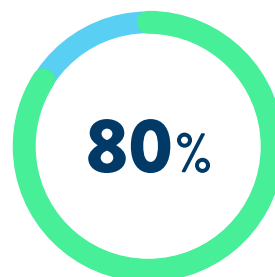


ACHONDROPLASIA IS RARE AND GENETIC

Achondroplasia is the most common type of skeletal dysplasia, a rare genetic condition that affects bone and cartilage development.



1 IN 25,000 CHILDREN
in North America are born
with achondroplasia



**80% OF CHILDREN
WITH ACHONDROPLASIA**
are born to average-stature parents

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As we gained a better understanding of what life with achondroplasia would be like, it was no longer something we worried about too much.

MICHAEL, FATHER OF A CHILD WITH ACHONDROPLASIA*

*Names have been anonymized.

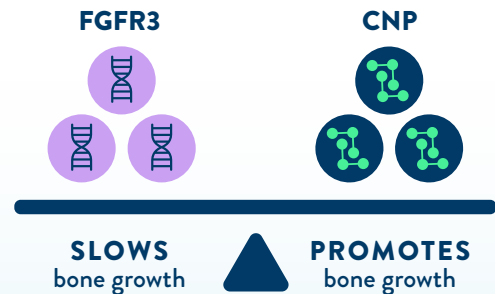
BONE GROWTH IS INHIBITED IN ACHONDROPLASIA

Most bones begin as cartilage. During a process known as endochondral bone growth, cartilage develops into bone at the growth plates (areas located at the ends of bones).

Endochondral bones make up **over 90% of the bones in the body**.

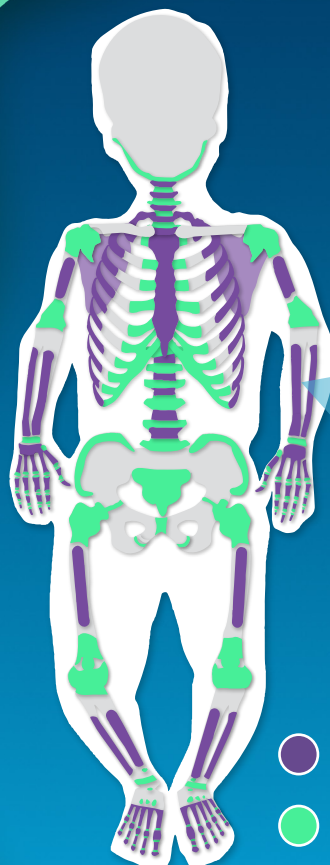
For cartilage to develop into bone, there needs to be a balance between two cell signals—CNP and FGFR3.

CNP, C-type natriuretic peptide; **FGFR3**, fibroblast growth factor receptor 3.



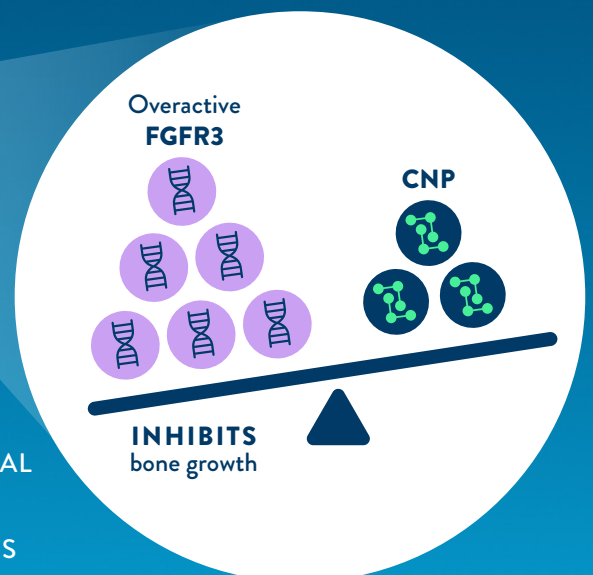
A GENETIC CHANGE CREATES AN IMBALANCE

Achondroplasia is caused by a change in the *FGFR3* gene, which causes FGFR3 signaling to become overactive and inhibit endochondral bone growth.



- ENDOCHONDRAL BONES
- GROWTH PLATES

This simplified image is for illustrative purposes only.



INHIBITED BONE GROWTH CAN HAVE A LASTING IMPACT

In achondroplasia, inhibited endochondral bone growth creates less space in the body for organs and nerves. This can affect development, daily functioning, and overall health.

Throughout the course of their life, your child may develop unique needs that require proactive, specialized care or incorporating environmental adaptations into their routine.



SUPPORT EVERY STEP OF THE WAY

Explore [InsideACH.com](https://www.insideach.com) to discover educational resources, useful information, and insightful perspectives you may be looking for throughout your child's achondroplasia journey.

Deepening your understanding

Attend an expert-led webinar to learn about inhibited bone growth, its potential long-term effects on development and health, and actionable ways to help support your child.

Finding specialized care

Because achondroplasia is rare, it may be difficult to find doctors with the experience you need. Locate providers in your area who can offer specialized care for your child.

JOIN THE INSIDE STORY

Gain access to support, expertise, and guidance from within the achondroplasia community at [InsideACH.com/Stay-Connected](https://www.insideach.com/Stay-Connected).



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Find your network, the only people that know best about caring for a child with achondroplasia are the people that are doing it or have done it.

RAEHEL, MOTHER OF RAEKAN