

Copy of a printed drawing of a model of collagen structure referenced as "Pauling's model. Collagen structure"

Contributors

Fraser, Robert Donald Bruce, 1924-

Publication/Creation

March 1952

Persistent URL

<https://wellcomecollection.org/works/xxx6mhmq>

License and attribution

You have permission to make copies of this work under a Creative Commons, Attribution, Non-commercial license.

Non-commercial use includes private study, academic research, teaching, and other activities that are not primarily intended for, or directed towards, commercial advantage or private monetary compensation. See the Legal Code for further information.

Image source should be attributed as specified in the full catalogue record. If no source is given the image should be attributed to Wellcome Collection.

with the α -keratin structure, which had always been accepted as representing a fiber-axis distance, has been found^{6, 7} to be in fact a diagonal spacing, there seems to be little reason to doubt that the 2.86 Å spacing of collagen represents a fiber-axis distance.

We found it impossible to formulate a satisfactory structure for collagen

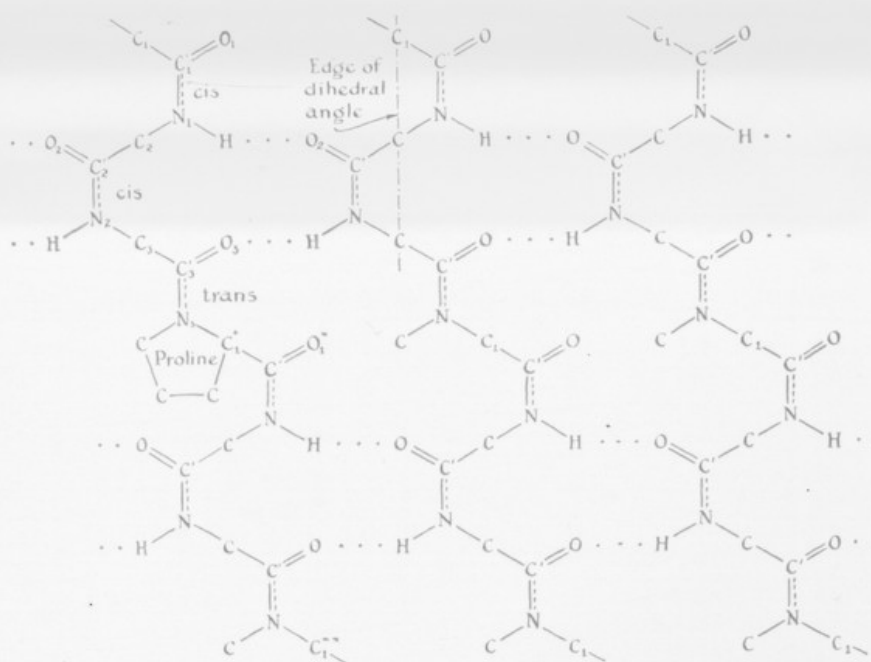


FIGURE 1

Diagrammatic representation of the configuration of polypeptide chains in the collagen-gelatin three-chain helix.

from cis amide groups alone. However, a satisfactory structure, described in detail in the following paragraphs, has been formulated with use of polypeptide chains in which there is an alternation of two cis groups and one trans group, as shown in figures 1 and 2. The angular orientation which the trans group is required to assume by its bonds with the contiguous cis