

Diagram referenced as "Helix-coil transition (schematic) (Peller)"

Contributors

Gratzer, W. B. (Walter Bruno), 1932-

Publication/Creation

February 1963

Persistent URL

<https://wellcomecollection.org/works/jyw9264b>

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.



Wellcome Collection
183 Euston Road
London NW1 2BE UK
T +44 (0)20 7611 8722
E library@wellcomecollection.org
<https://wellcomecollection.org>

HELIX-R

earlier pointed out that residues in determined which is more stable than coil.

all-isobaric partition can be written form:

$$g(N_h, N_e, N_{hc})$$

$$f_{hc} x N_e e^{-x(w_{hh} N_{hh} + w_{ee} N_{ee} + w_{hc} N_{hc})}$$

respectively, the number of units where a unit may be three for an α -helix. Functions for the helical and random coil are the partition functions of residues. N_{hh} and N_{hc} are the number of neighboring helical residues. N_{hc} is the number which is helical and w_{ee} and w_{hc} are the energy per mole for these

polypeptide chain consisting follows from the de

$$x(N_h + N_e) = N$$

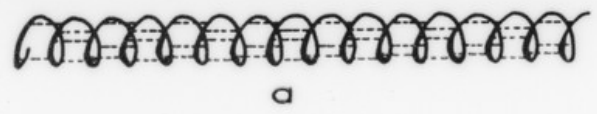
for each residue and we have

$$2N_{hh} + N_{hc} = 2N_h$$

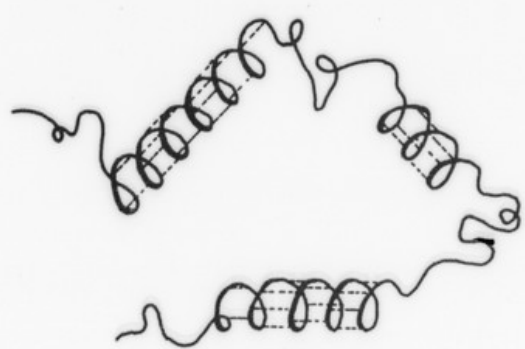
$$2N_{ee} + N_{hc} = 2N_e$$

as 2b and 2c the expressions of N_h , N_e and N_{hc}

$$N_h, N_e, N_{hc} (j_h)^{N_h} (j_e)^{N_e} (j_{hc})^{N_{hc}}$$



a



b



c