

AL-FARABI KAZAKH NATIONAL UNIVERSITY

G. Tussupbekova

PHYSIOLOGY OF DEVELOPMENT
OF SCHOOLCHILDREN

Educational manual

Almaty
«Qazaq University»
2020

UDC 612(075)
LBC 28.707 я73
T 96

*Recommended for publication by the decision
of the Faculty of Biology and Biotechnology,
RICO of the Kazakh National University named after Al-Farabi
(protocol №1 dated 13.11.2019.)*

Reviewers:

Doctor of Medical Sciences, Professor *A.M. Aykimbaev*
Doctor of Biological Sciences, Professor *M.K. Murzakhmetova*

Tussupbekova G.

T 56 Physiology of development of schoolchildren. Educational
manual / G. Tussupbekova. – Almaty: Qazaq University, 2020.
– 158 p.

ISBN 978-601-04-5098-1

The educational manual considers in detail consistent patterns of individual development, basic methods of diagnostics of physiological levels of development of children and adolescents, structure, functioning and age of the transformation of regulatory systems (nervous and endocrine), sensory and visceral systems, physiological characteristics of the body in different periods of ontogenesis. The course physiology of development of schoolchildren is of a great practical importance and is one of the most important components of pedagogical education. Physiological knowledge is necessary for the teacher to actively and consciously participate in the health protection of children and adolescents. The educational manual is recommended for students of pedagogical and psychological-pedagogical directions, it can also be useful for teachers, practical psychologists and social workers.

UDC 612(075)
LBC 28.707 я73

ISBN 978-601-04-5098-1

© Tussupbekova G., 2020
© Al-Farabi KazNU, 2020

Educational issue

Tussupbekova Gulmira

**PHYSIOLOGY OF DEVELOPMENT
OF SCHOOLCHILDREN**

Educational manual

Editor *V. Popova*

Typesetting *U. Moldasheva*

Cover design *Ya. Gorbunov*

Cover design used photos from sites
www.MyTravelBook.org

IB №13580

Signed for publishing 17.04.2020. Format 60x84 ¹/₁₆. Offset paper.
Digital printing. Volume 9,87 printer's sheet. 80 copies. Order №3421.

Publishing house «Qazaq University»
Al-Farabi Kazakh National University
KazNU, 71 Al-Farabi, 050040, Almaty

Printed in the printing office of the «Qazaq University» publishing house.



9 786010 450981