

Health and Physical Education

Textbook for Class IX



13149

विद्यया ऽ मृतमश्नुते



एन सी ई आर टी
NCERT

राष्ट्रीय शैक्षिक अनुसंधान और प्रशिक्षण परिषद्
NATIONAL COUNCIL OF EDUCATIONAL RESEARCH AND TRAINING

ISBN 978-93-5007-819-8

First Edition

November 2016 Kartika 1938

Reprinted

August 2019 Shrawana 1941

January 2020 Magha 1941

PD 5T RPS

© National Council of Educational
Research and Training, 2016

₹ 200.00

Printed on 80 GSM paper with NCERT
watermark

Published at the Publication Division
by the Secretary, National Council of
Educational Research and Training,
Sri Aurobindo Marg, New Delhi 110 016
and printed at Eye Vision Printograph, 78,
Mohkampur Industrial Complex, Phase-I,
Delhi Road, Meerut - 250 002 (U.P.)

ALL RIGHTS RESERVED

- ❑ No part of this publication may be reproduced, stored in a retrieval system or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording or otherwise without the prior permission of the publisher.
- ❑ This book is sold subject to the condition that it shall not, by way of trade, be lent, re-sold, hired out or otherwise disposed of without the publisher's consent, in any form of binding or cover other than that in which it is published.
- ❑ The correct price of this publication is the price printed on this page. Any revised price indicated by a rubber stamp or by a sticker or by any other means is incorrect and should be unacceptable.

**OFFICES OF THE PUBLICATION
DIVISION, NCERT**

NCERT Campus
Sri Aurobindo Marg
New Delhi 110 016 Phone : 011-26562708

108, 100 Feet Road
Hosdakere Halli Extension
Banashankari III Stage
Bengaluru 560 085 Phone : 080-26725740

Navjivan Trust Building
P.O. Navjivan
Ahmedabad 380 014 Phone : 079-27541446

CWC Campus
Opp. Dhankal Bus Stop
Panihati
Kolkata 700 114 Phone : 033-25530454

CWC Complex
Maligaon
Guwahati 781 021 Phone : 0361-2674869

Publication Team

Head, Publication Division : Anup Kumar Rajput
Chief Editor : Shveta Uppal
Chief Production Officer : Arun Chitkara
Chief Business Manager : Bibash Kumar Das
Editor : Bijan Sutar
Production Assistant : Sunil Kumar

Cover

D. K. Shende

Illustrations

Arvinder Chawla

FOREWORD

Many factors like, physical, psychological, socio-economic and cultural influence our health, both in our day-to-day life and in the long run. Health of children is very important as they constitute a large percentage of our population. In this endeavour, school education plays an important role. Right to Education Act 2009 has very categorically focused on the role of school in holistic development and health of children in the age group of 6-14 years. Therefore, health and physical fitness needs to be looked into at different levels of schooling. Health and Physical Education (including Yoga) is an integral part of the school curriculum, towards an overall development of the child. With this view, the National Council of Educational Research and Training (NCERT) is in the process of developing textbooks on Health and Physical Education for Classes IX and X.

The present textbook – *Health and Physical Education* for Class IX, focuses on a holistic understanding of health highlighting importance of exercise, games and sports, nutrition and the environment. This book also provides a scope to discuss the psycho-social and mental health related issues of children and collective responsibilities for healthy community living. Given the interdisciplinary nature of this subject, cross references have also been mentioned.

Given the inter-related nature of the concepts covered in the area of Health and Physical Education, the presentation is made in a cohesive and integrated manner, rather adopting fragmentary approach. Experiential learning activities for acquiring skills for healthy living are made an integral part of the book.

NCERT appreciates the hard work done by the Textbook Development Committee. I am highly thankful to Professor Saroj Yadav, Dean (Academic) and Project Coordinator of National Population Education Project (NPEP) and Adolescence Education Programme (AEP) for her continuous effort to develop this material in the present form. Several experts and teachers contributed towards the finalisation of this book. We are grateful to them and their institutions.

As an organisation committed to systemic reform and continuous improvement in the quality of our products, NCERT welcomes comments and suggestions which will enable us to undertake further revision and refinement.

HRUSHIKESH SENAPATY

Director

National Council of Educational
Research and Training

New Delhi
June, 2016

© NCERT
not to be republished

TEXTBOOK DEVELOPMENT COMMITTEE

MEMBERS

Bharati Sarkar, *Former Associate Professor*, Maitreyi College, Delhi University.

I.V Basavaraddi, *Director*, Morarji Desai National Institute of Yoga, 68, Ashoka Road, Near Gol Dak Khana, New Delhi.

Jaishri Acharya, *Reader*, Laxmibai National University of Physical Education, Shakti Nagar, Gwalior-474002 (MP).

Late Ajay Singh Ruhal, *Associate Professor*, DESS, NCERT, New Delhi.

Sagarika Bannerjee, *Dean and Head*, Department of Physical Education, Viswabharati University, Shantiniketan- 731235 (West Bengal).

Sima Saigal, *Assistant Professor*, NERIE Shillong, NCERT.

Swati Bhawe, *Executive Director*, Association of Adolescent and Child Care in India, Visiting Consultant Indraprastha Apollo Hospital, New Delhi

MEMBER COORDINATOR

Saroj Yadav, *Dean Academic and Project Coordinator* of NPEP, AEP, NCERT, New Delhi.

THE CONSTITUTION OF INDIA

PREAMBLE

WE, THE PEOPLE OF INDIA, having solemnly resolved to constitute India into a ¹**[SOVEREIGN SOCIALIST SECULAR DEMOCRATIC REPUBLIC]** and to secure to all its citizens :

JUSTICE, social, economic and political;

LIBERTY of thought, expression, belief, faith and worship;

EQUALITY of status and of opportunity; and to promote among them all

FRATERNITY assuring the dignity of the individual and the ²[unity and integrity of the Nation];

IN OUR CONSTITUENT ASSEMBLY this twenty-sixth day of November, 1949 do **HEREBY ADOPT, ENACT AND GIVE TO OURSELVES THIS CONSTITUTION.**

1. Subs. by the Constitution (Forty-second Amendment) Act, 1976, Sec.2, for "Sovereign Democratic Republic" (w.e.f. 3.1.1977)
2. Subs. by the Constitution (Forty-second Amendment) Act, 1976, Sec.2, for "Unity of the Nation" (w.e.f. 3.1.1977)

ACKNOWLEDGEMENTS

The National Council of Educational Research and Training (NCERT) acknowledges the valuable contribution of the following individuals for reviewing and refining the manuscript of this book: A.K. Uppal, Mayur Vihar, Phase II, Pocket E, Delhi; Ajay Kumar Bansal, Sports Authority of India, New Delhi; Amita Gupta, *Freelance Editor*, Pushp Vihar, New Delhi; Ankur Yadav, *Assistant Professor*, Department of Communication, NIHFW, New Delhi; Asha Bansal, SPE Zone-4, Directorate of Education, District North, East Yamuna Vihar, Delhi; Ashok Kumar, MD, *Programme Officer*, Training Cell, IPP VIII Delhi Sector VII, Rohini; Bharti, MD, *Assistant Director* (Ayurveda), Central Council for Research in Ayurvedic Sciences, 61-65, Institutional Area, Opp. D-Block, Janakpuri, New Delhi; Devender Singh Yadav, *Senior Lecturer*, SCERT (DIET, DG), Delhi; Dhananjoy Shaw, Indira Gandhi Institute of Physical Education, F-403, Green Valley Apartments, Sector-22, Dwarka, New Delhi; Gulab Singh Gahlot, *SPE*, Office of Deputy Director of Education South, New Delhi; Indu Mazumdar, *Professor*, Laxmibai National University of Physical Education, Shakti Nagar, Gwalior-474002; D.C. Jain, *Deputy Director General* (NCD), Directorate General of Health Services, Ministry of Health and Family Welfare, Nirman Bhawan, New Delhi; Indu Sardana, *Former TGT-Home Science*, Sarvodaya Kanya Vidyalaya, Malviya Nagar, New Delhi; Jogishwar Goswami, Amity School of Physical and Sport Sciences (ASPESS), Sector-125, Amity University, Noida, U.P.; Manju Jain, *Professor*, DEE, NCERT, New Delhi; Mukesh Kohli, *Associate Professor*, Physical Education, R.L.A College (Evening), Binito Juarez Marg, New Delhi; N.K. Jangira, *Professor* (Retd.), and Former Head, DTEE, NCERT, New Delhi; Meenakshi Pahuja, *Assistant Professor*, Physical Education, Lady Shri Ram College for Women, Lajpat Nagar, New Delhi; N.B. Shukla, *Professor*, Physical Education, Faculty of Arts, BHU, Varanasi; Poonam Khattar, *Associate Professor*, NIHFW, New Delhi; Raj Bala Dalal, *Assistant Director*, Physical Education, New Delhi; Ramesh Pal, *Professor*, Laxmibai National University of Physical Education, Sadhana Arya, D-II/354, Pandara Road, New

Delhi-3; Shakti Nagar, Gwalior-474002; Sudhir Kumar Sharma, *Associate Professor*, Department of Physical Education, Swarnim Gujarat Sports University, Sector-15, Gandhinagar; Sandeep Tiwari, *Associate Professor*, IGIPES, University of Delhi, Delhi; Shamsher Singh Jung Bahadur, *Retired Professor*, Dean Faculty of Education, Department of Physical Education, CDL University, Sirsa; Sheela Kumari S, *Associate Professor*, Department of Physical Education, Gargi College, Siri Fort Road, New Delhi; Shivani Goswami, Retired from Mother's International School, Sri Aurobindo Marg, New Delhi; S. Gnaneswara Rao, RIE Bhubaneswar; Vikram Singh, *Assistant Director*, Phy. Edu., New Mehrauli Road, Jawaharlal Nehru University, New Delhi-67; W.D. Bhutia, DDG, Ministry of Health and Family Welfare, New Delhi.

We acknowledge with thanks the training material developed by Department of Sports for PYKKA, Ministry of Youth Affairs, Government of India. The material included in the chapter on individual and team game is heavily dependant on above materials.

The chapter on yoga is taken from the book *Yoga — a Healthy Way of Living* developed by NCERT for Secondary Stage.

We acknowledge with thanks for all the support given by Prof. Neeraja Rashmi, *Head DESS* for this textbook.

We acknowledge with thanks Shri R.N. Bhardwaj and Shri Naresh Kumar Yadav for editing this material.

We acknowledge the contribution of Arvinder Chawla for making illustrations for this textbook, *Junior Project Fellows* Jayvir Singh and Sana Rehman and the word processing team Geeta Dwivedi and Nitin Kumar Gupta.

The Council gratefully acknowledges the valuable suggestions received from the National Monitoring Committee in the development of the manuscript of this textbook.

How to Use this Book

Health is of concern to both the young and the old. Good health can be maintained by eating the right kind of food, living in a healthy environment and undertaking physical activities throughout life. This textbook is, therefore, of more importance for the growing young students. But then, how can both teachers and students make the best use of this book?

As a teacher you have to understand that this textbook is different from other subject textbooks in the sense that its contents need to be understood well and applied throughout life for one's own well being and that of others. Its use should not, therefore, be solely examination driven. Even a general discussion from time to time would be useful. Activities included in it, are of practical nature and enjoyable and you can make sure that concepts are clarified by involving students in experiential learning. Physical activities and exercises of all kinds have been given to ensure the development of fitness and questioning skills, including life skills.

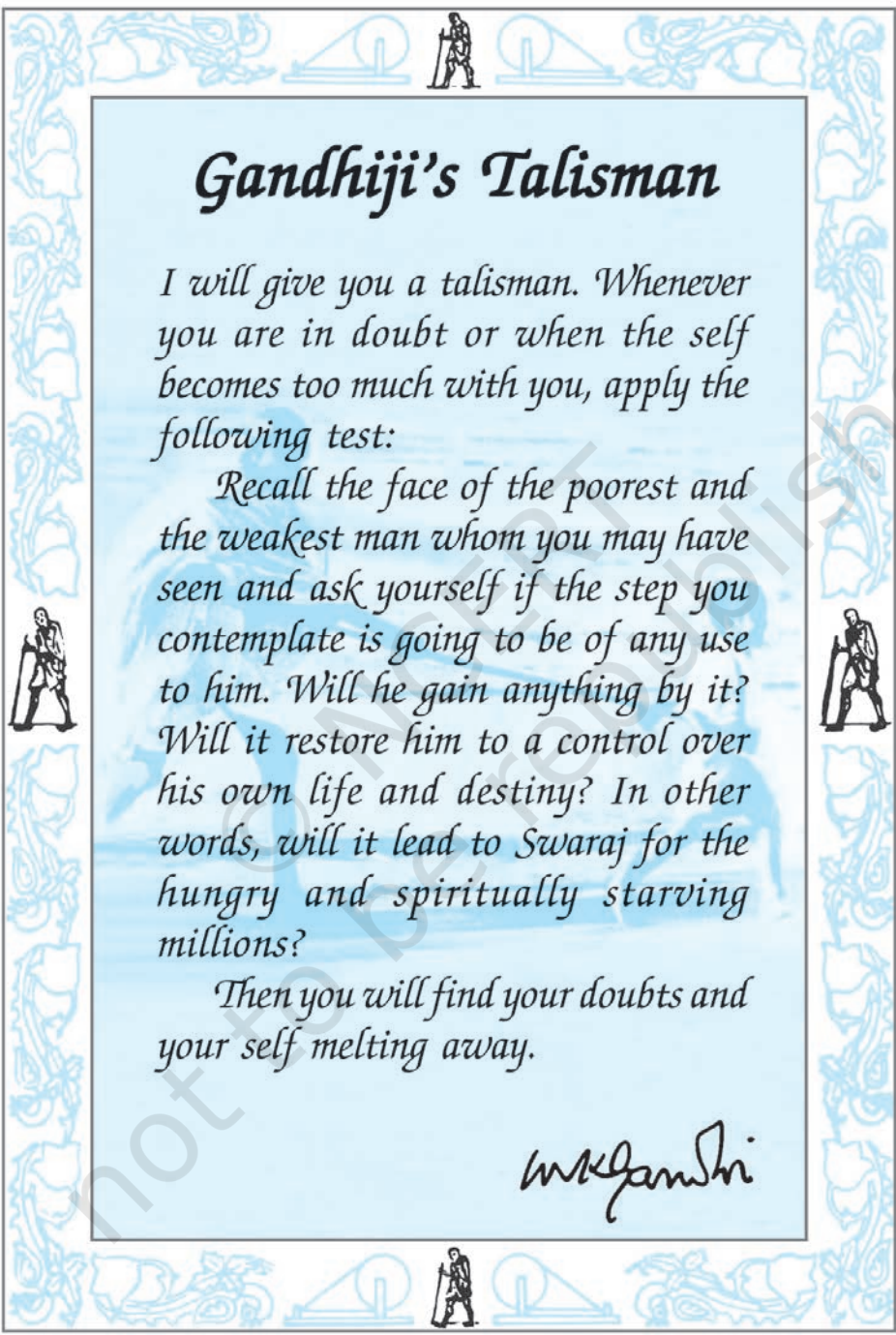
You as a student can undertake activities, play games and do yoga as given in the book in a relaxed manner for healthy living. The textbook also contains abundant interesting **case studies** related to your age and concerns. Thought provoking incidents have been included at relevant places. **Think and answer** questions related to various dimensions of health and physical education have been added.

We would welcome your feedback on this book in terms of — How did you like this textbook? What are your experiences in organising or being a part of various activities? What were the difficulties faced by you? What changes would you like to see in the next version of this book? Do write to us on all these and all other matters related to this textbook. You could be a parent, a teacher, a student or just a casual reader. You can send your feedback on the form at the end of this book to the undersigned.

We sincerely hope you enjoy this book and learn more than it offers.

New Delhi
June, 2016

PROFESSOR SAROJ YADAV
Dean (Academic)
National Council of Educational
Research and Training



Gandhiji's Talisman

I will give you a talisman. Whenever you are in doubt or when the self becomes too much with you, apply the following test:

Recall the face of the poorest and the weakest man whom you may have seen and ask yourself if the step you contemplate is going to be of any use to him. Will he gain anything by it? Will it restore him to a control over his own life and destiny? In other words, will it lead to Swaraj for the hungry and spiritually starving millions?

Then you will find your doubts and your self melting away.

MK Gandhi

<i>Foreword</i>	<i>iii</i>
<i>How to Use this book</i>	<i>ix</i>
Chapter 1 Health and Diseases	1-15
Chapter 2 Growing up with Confidence	16-29
Chapter 3 Physical Education	30-37
Chapter 4 Physical Fitness	38-45
Chapter 5 Sports Training	46-52
Chapter 6 Individual Sports	53-80
Chapter 7 Team Games	81-108
Chapter 8 Ethics in Sports	109-118
Chapter 9 Personality Development through Yoga	119-150
Chapter 10 Waste Management	151-160
Chapter 11 Diet for Healthy Living	161-176
Chapter 12 First Aid and Safety	177-184
Chapter 13 Social Health	185-193
Chapter 14 Adolescent Friendly Health Services	194-201
Appendix Feedback Questionnaire	202-203

CONTENTS

CHILDREN'S BILL OF RIGHTS

A child is every person under the age of 18 years. Parents have the primary responsibility for the upbringing and development of the child. The State shall respect and ensure the rights of the child.

- I have the Right to express my views freely which should be taken seriously, and everyone has the Responsibility to listen to others. (Article 12,13)
- I have the Right to good health care, and everyone has the Responsibility to help others get basic health care and clean water. (Article 24)
- I have the Right to a good education, and everyone has the Responsibility to encourage all children to go to school. (Article 28,29,23)
- I have the Right to be loved and protected from harm and abuse, and everyone has the Responsibility to love and care for others. (Article 19)
- I have the Right to be included whatever my abilities, and everyone has the Responsibility to respect others for their differences. (Article 23)
- I have the Right to be proud of my heritage and beliefs, and everyone has the Responsibility to respect the culture and belief of others. (Article 29,30)
- I have the Right to a safe and comfortable home and everyone has the Responsibility to make sure all children have homes. (Article 27)
- I have the Right to make mistakes, and everyone has the Responsibility to accept we can learn from our mistakes. (Article 28)
- I have the Right to be well fed, and everyone has the Responsibility to prevent people from starving. (Article 24)
- I have the Right to a clean environment, and everyone has the Responsibility not to pollute it. (Article 29)
- I have the Right to live without violence (verbal, physical, emotional), and everyone has the Responsibility not to be violent to others. (Article 28,37)
- I have the Right to be protected from economic and sexual exploitation, and everyone has the Responsibility to ensure that no child is forced to work and is given a free and secure environment. (Article 32,34)

These rights and responsibilities are enshrined in the United Nations Convention on the Rights of the Child, 1989. It contains all the rights which children and young people have all over the world. The Government of India signed this document in 1992.