







EuTEACH

European Training in Effective Adolescent
Care and Health

Biopsychosocial Development during Adolescence

OBJECTIVES

-  Review the evolution of the concept of adolescence, and explore existing definitions
-  Identify the main biological events and timings of puberty and growth
-  Identify the psychological and social events of adolescent development
-  Manage the delivery of health care according to adolescent bio-psychosocial development

ENTRY SCENARIO

You are involved in a school health service. The director of a co-educational school wants to update regulations regarding the minimum age requirements for adolescent students to engage in certain behaviours such as leaving school at lunchtime to sit in the nearby cafés; joining the school fitness centre for body building activities; and wearing tattoos or piercing. When asked your opinion, you seek further clarification about the situation and learn that the school provides both general and professional educations. The students come from middle and lower class families, as well as from a nearby Moroccan community. Boys and girls attend the same classes. Although the school director feels that today's teenagers reach maturity earlier than before, some older teachers feel differently. You propose to open a forum discussion with the teaching team to consider the process of adolescent maturation, to review the average development stage reached by each class level, and to discuss the individual variations in maturation as well as the factors contributing to those variations

Review the evolution of the
concept of adolescence, and
explore existing definitions

what does adolescence

mean in your society ?

what did it mean for you ?

“Our world has reached a critical stage: our children no longer listen to their elders. The end of the world is not far ...”

Aegyptian priest 2000 Av. J.-C.

“The son feels he is equal to his father. He does not respect his parents anymore. What he wants is to be free. The pupils insult their teachers. And , as the height of this horrific situation, in the name of liberty and equality, sex everywhere !”

Platon, the Republic

Adolescence

“The media present adolescence as hell on earth, chock full of evil cliques, domineering parents and wrenching decisions that will determine the rest of your life. Nah. Adolescence is a time to sit back, make some friends and maybe discover what you are good at. Don’t believe the hype.”

Advice to 13 year olds from a 17 year old
NYT, 1998

HISTORICAL PERSPECTIVE



The situation among the Greeks and Romans



The XIXth. century: emergence of the concept



The beginning of the 20th century:



adolescence as a crisis



different theories (Freud, Erikson, Piaget, Goldberg)



The present situation:









adolescence as a problem (e.g. the media)

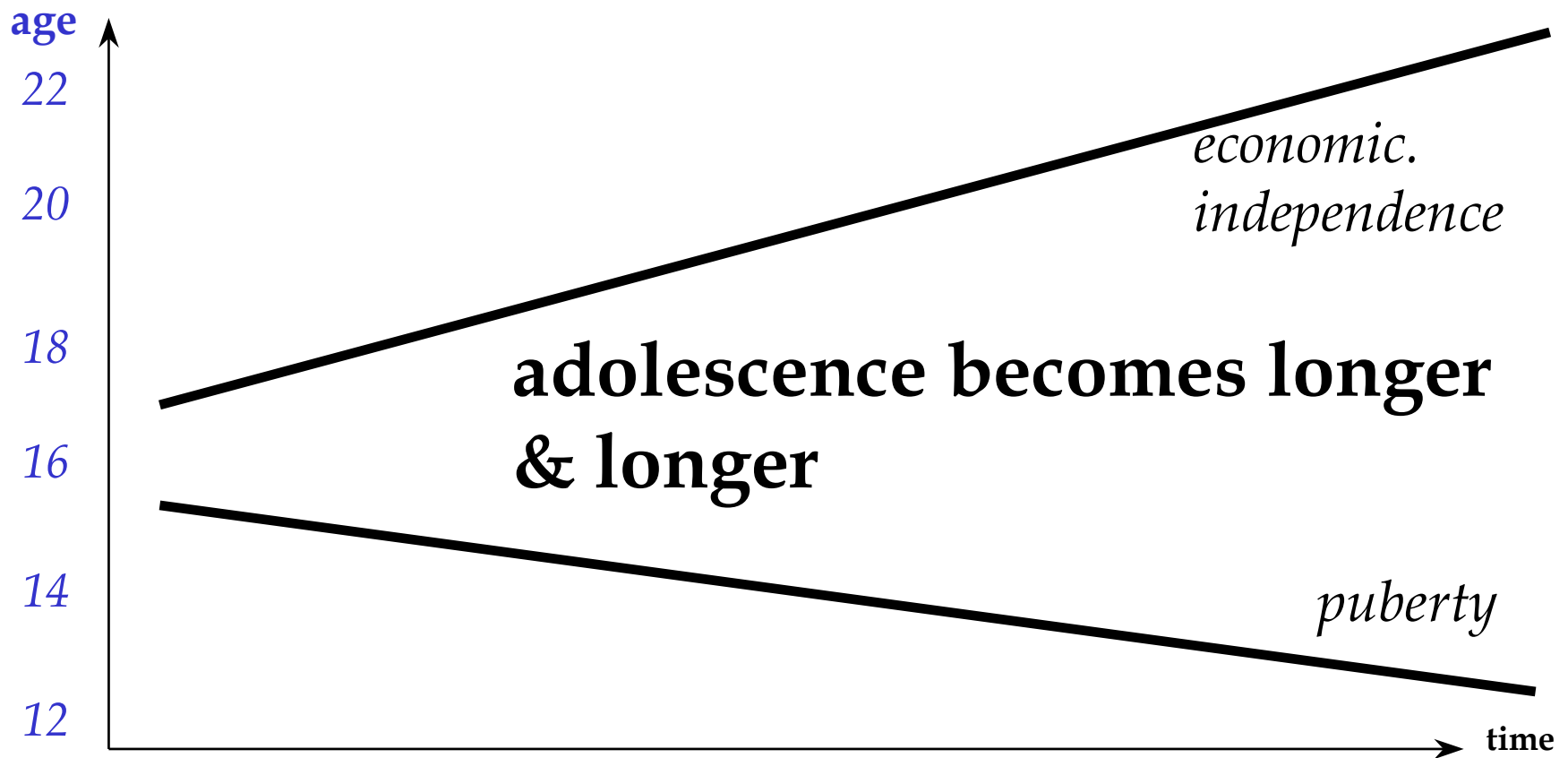


adolescence as a mirror of the society problems

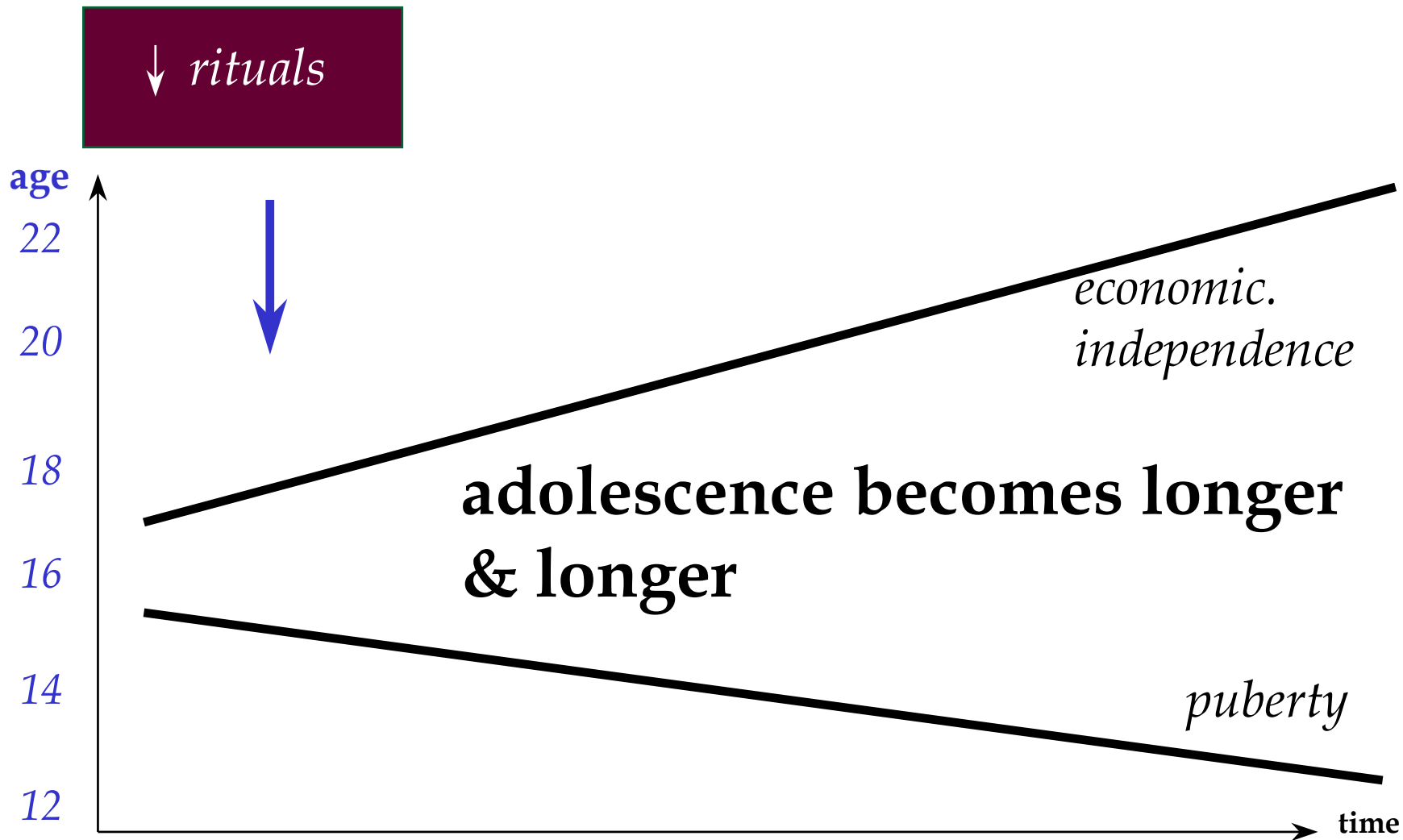
Definition by age ?

-  WHO: 10-19 years
-  Society for Adolescent medicine: 10-24
-  Young people: 15-24 years
-  Youth: 10-24 years
-  Many countries: 12-18 years or 10-18 years
-  What else ?

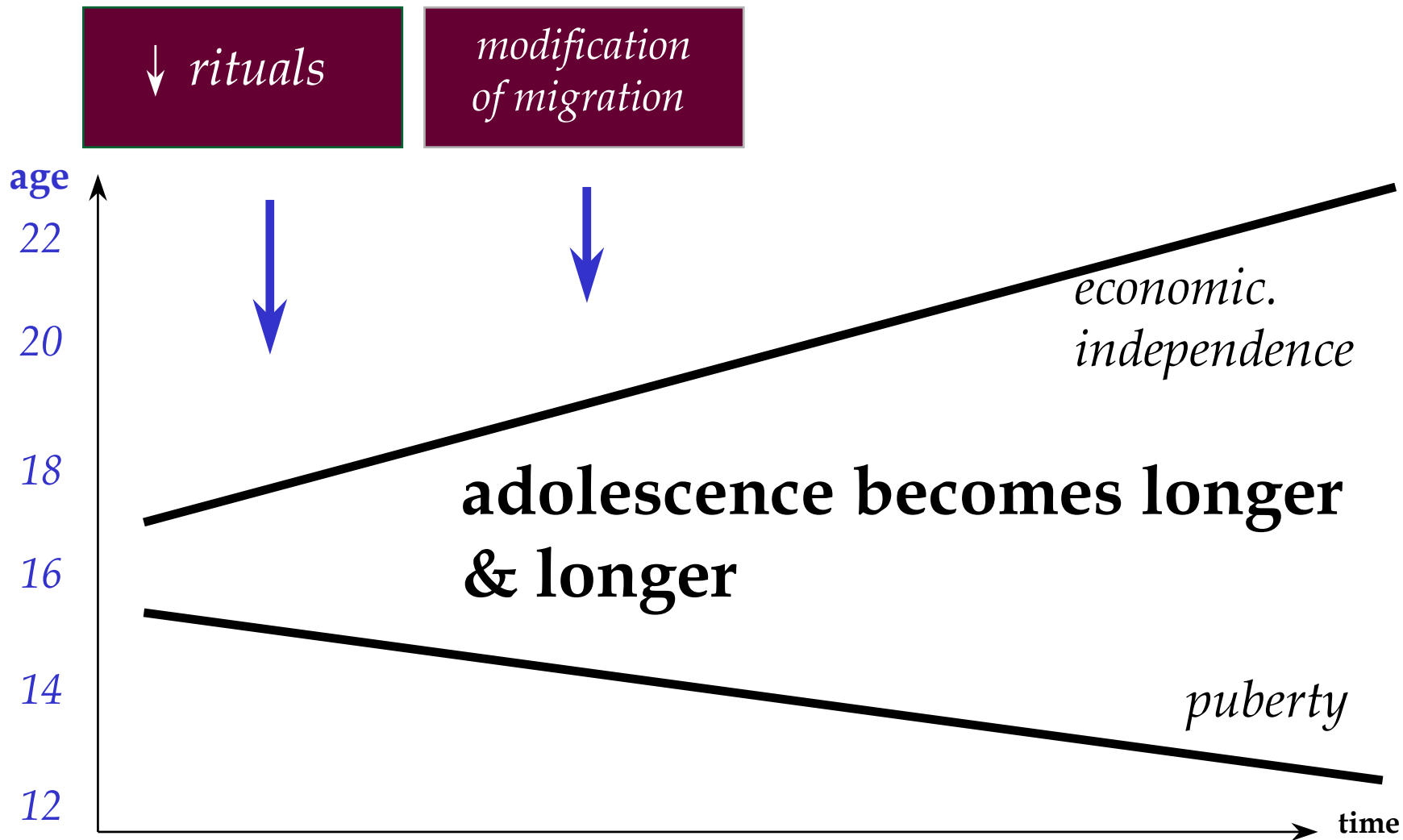
ADOLESCENCE IN A TRANSITIONAL SOCIETY



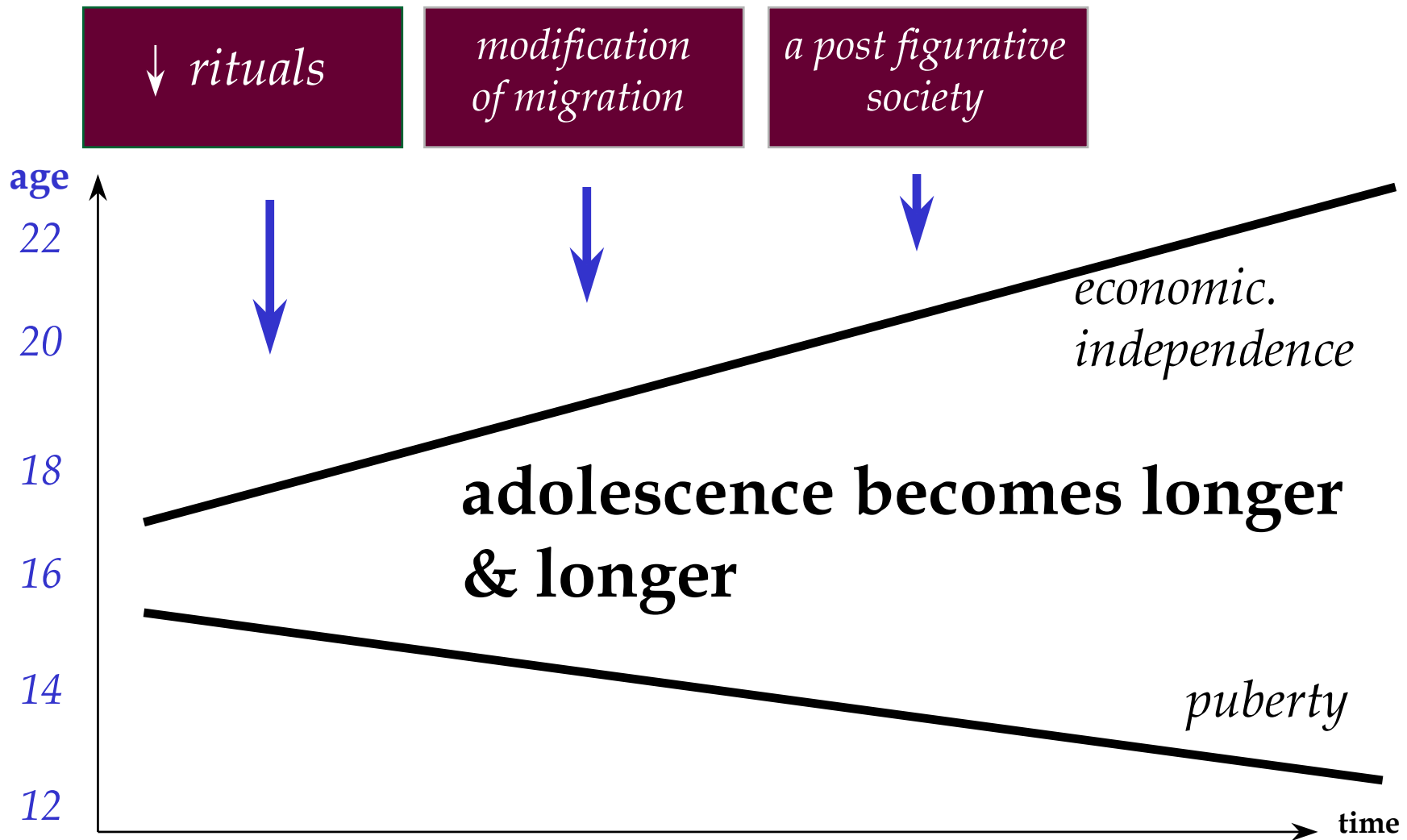
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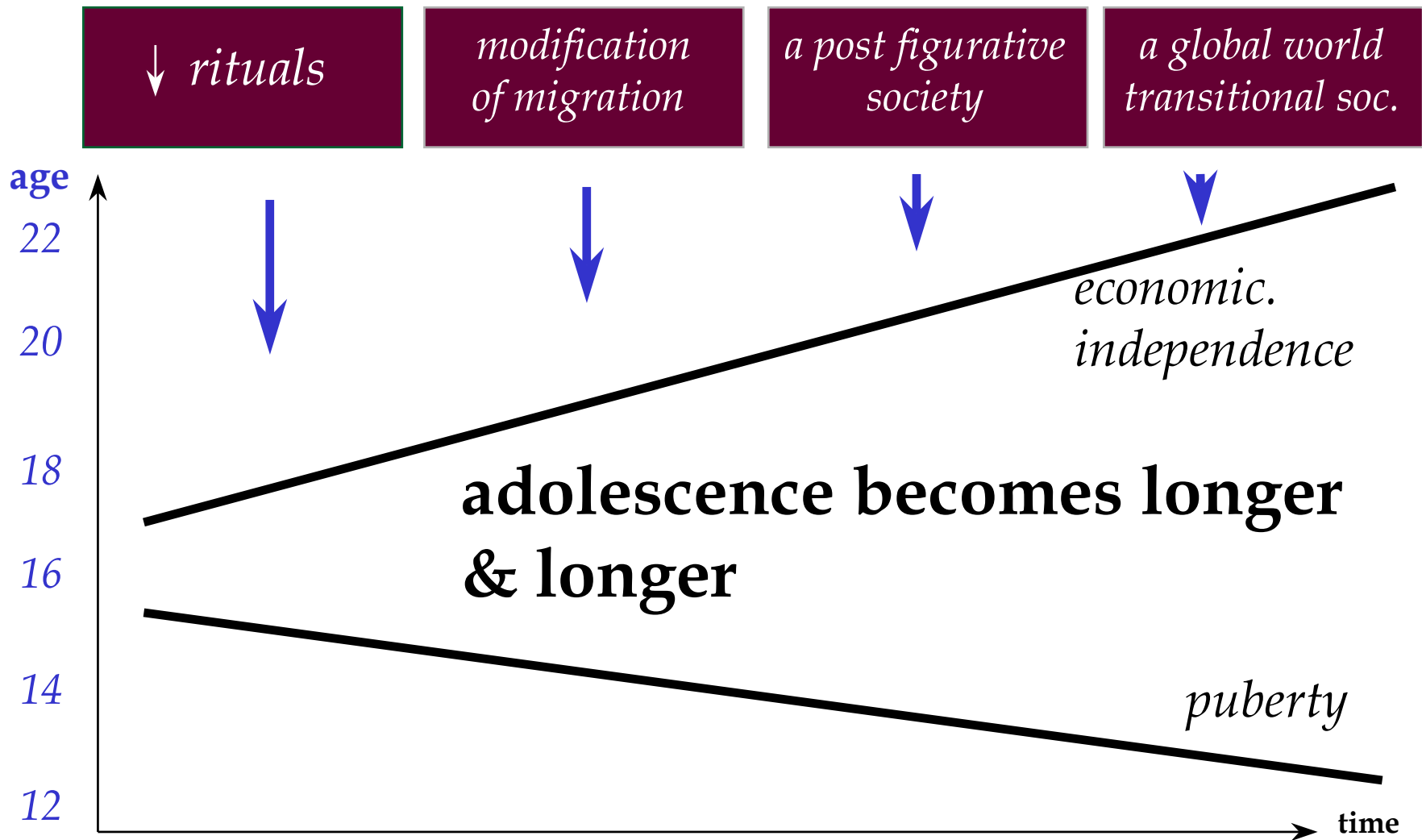
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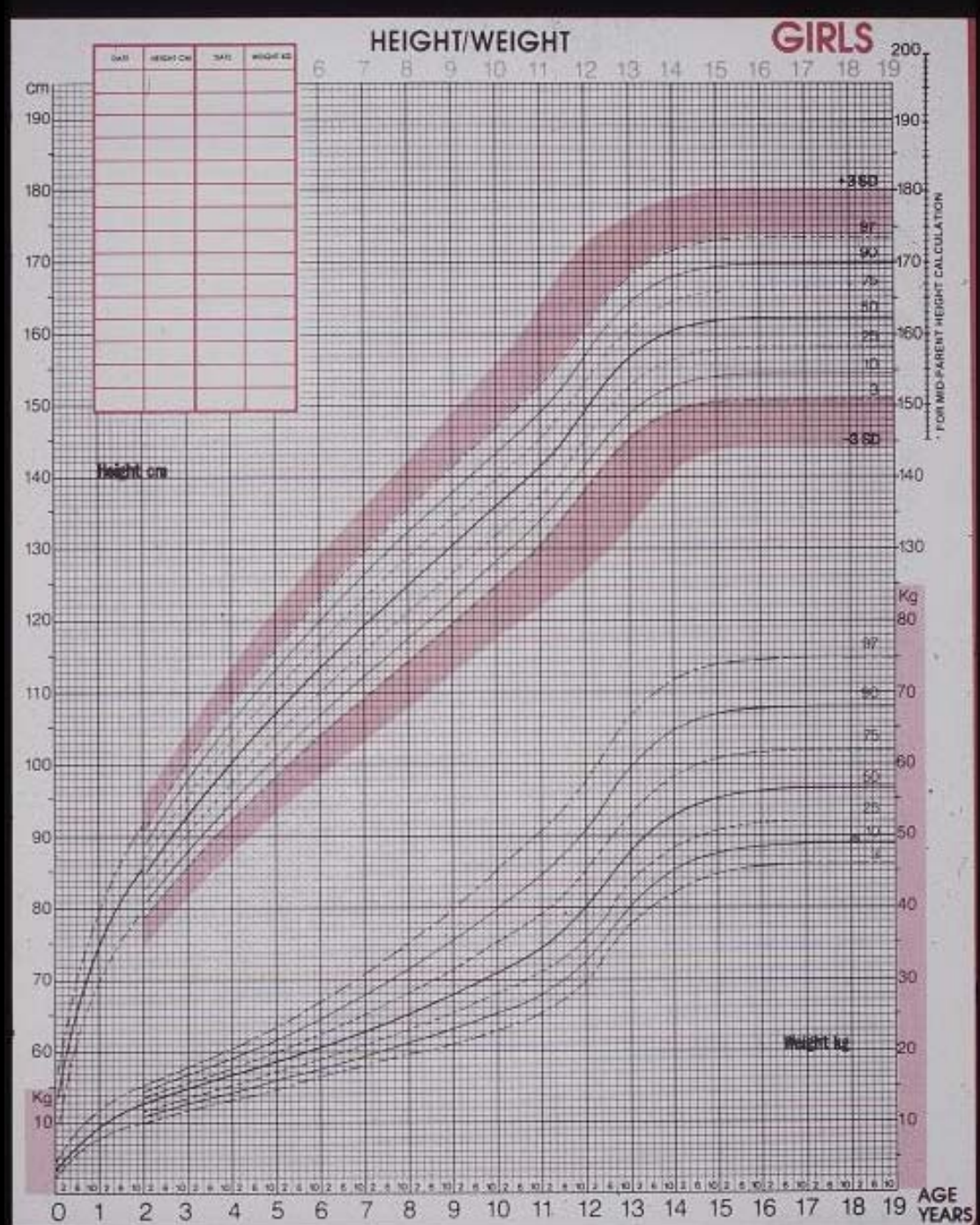
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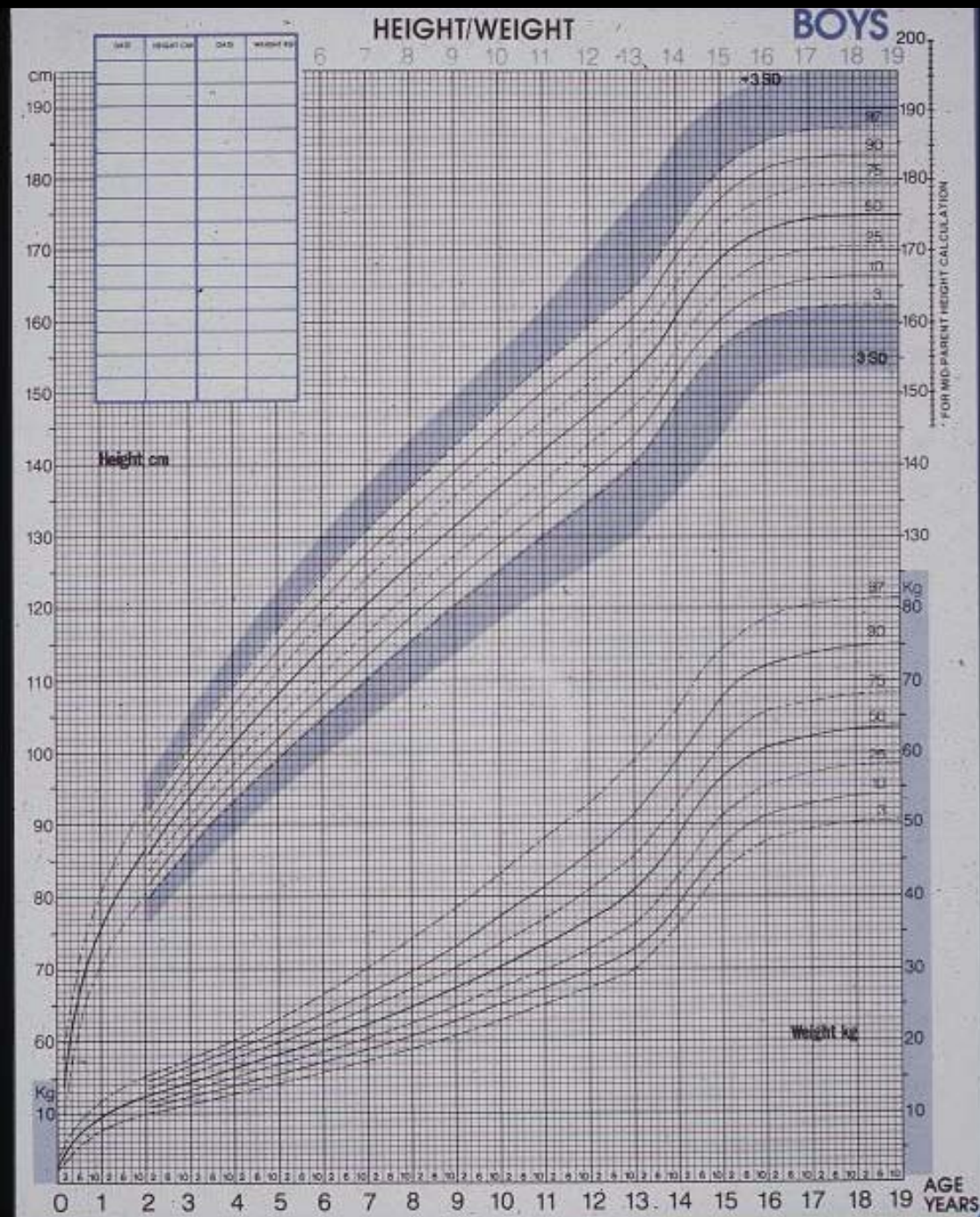
CONSEQUENCES FOR THE HEALTH PROFESSIONAL

-  our adolescence is no longer a reference (and this applies to parents as well)
-  impact of socio-economic and cross cultural factors on health
-  role of the health professional regarding the vocational issues adolescent face

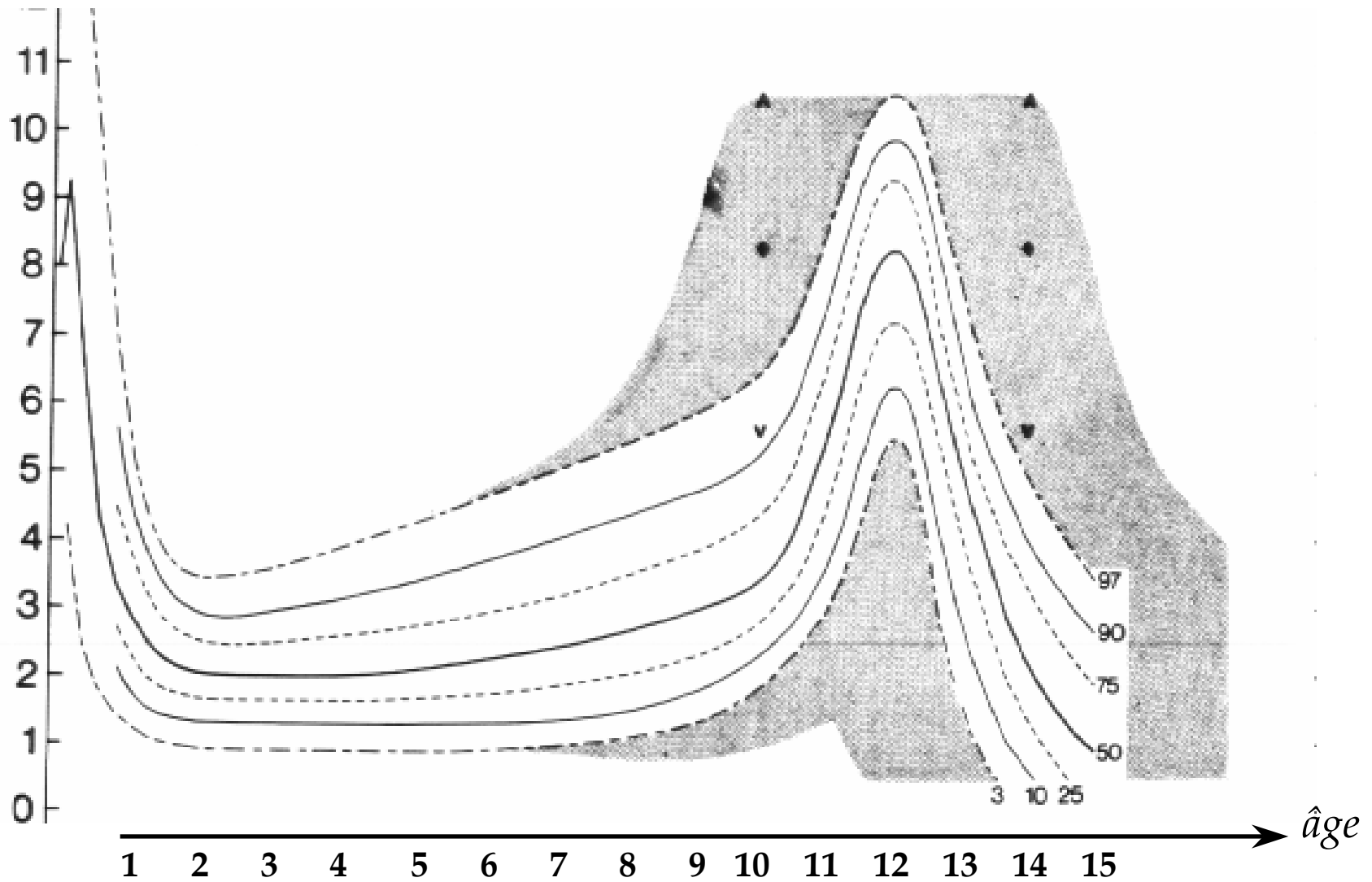
Identify the main biological
events and timings of
puberty and growth

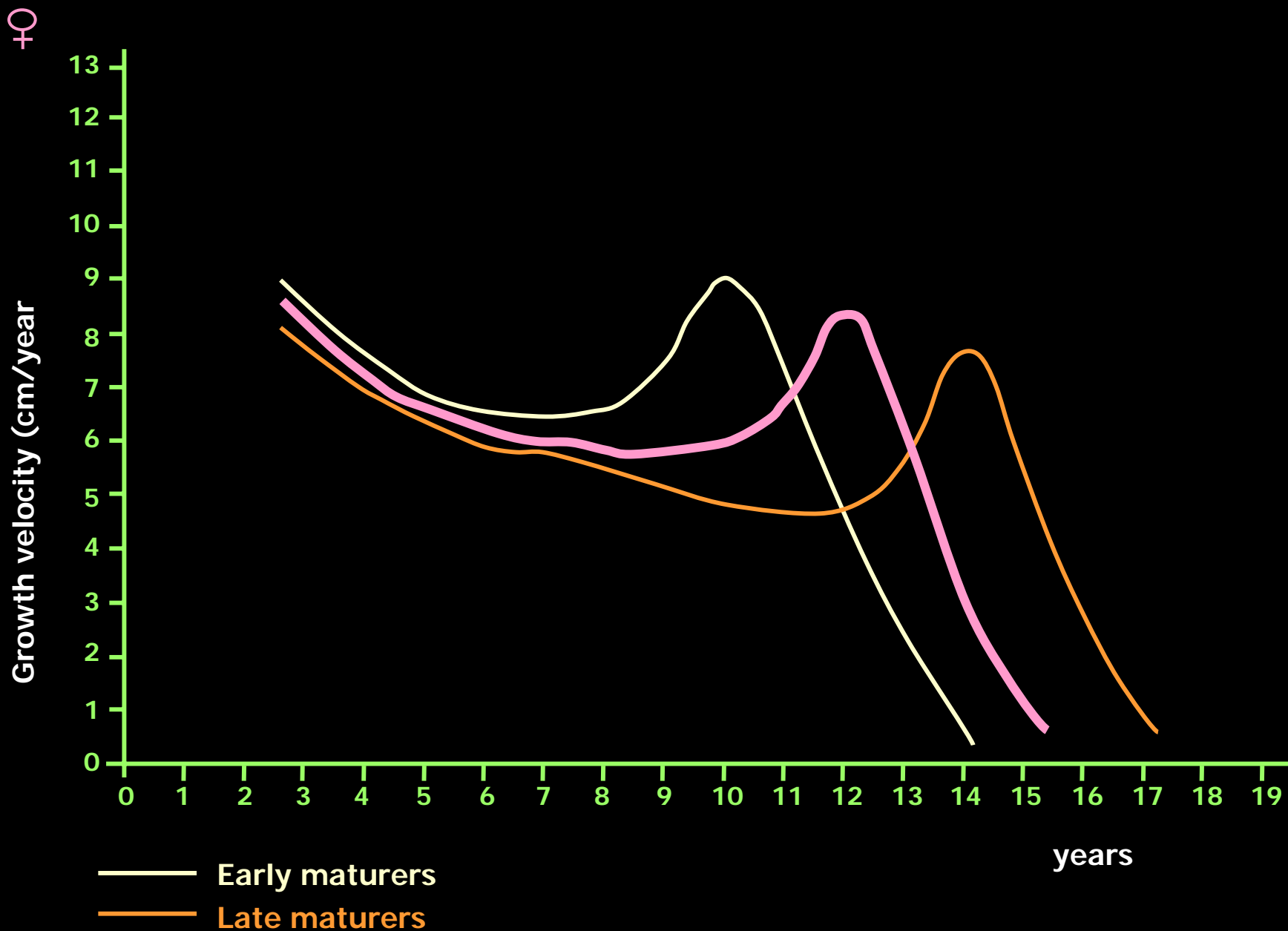


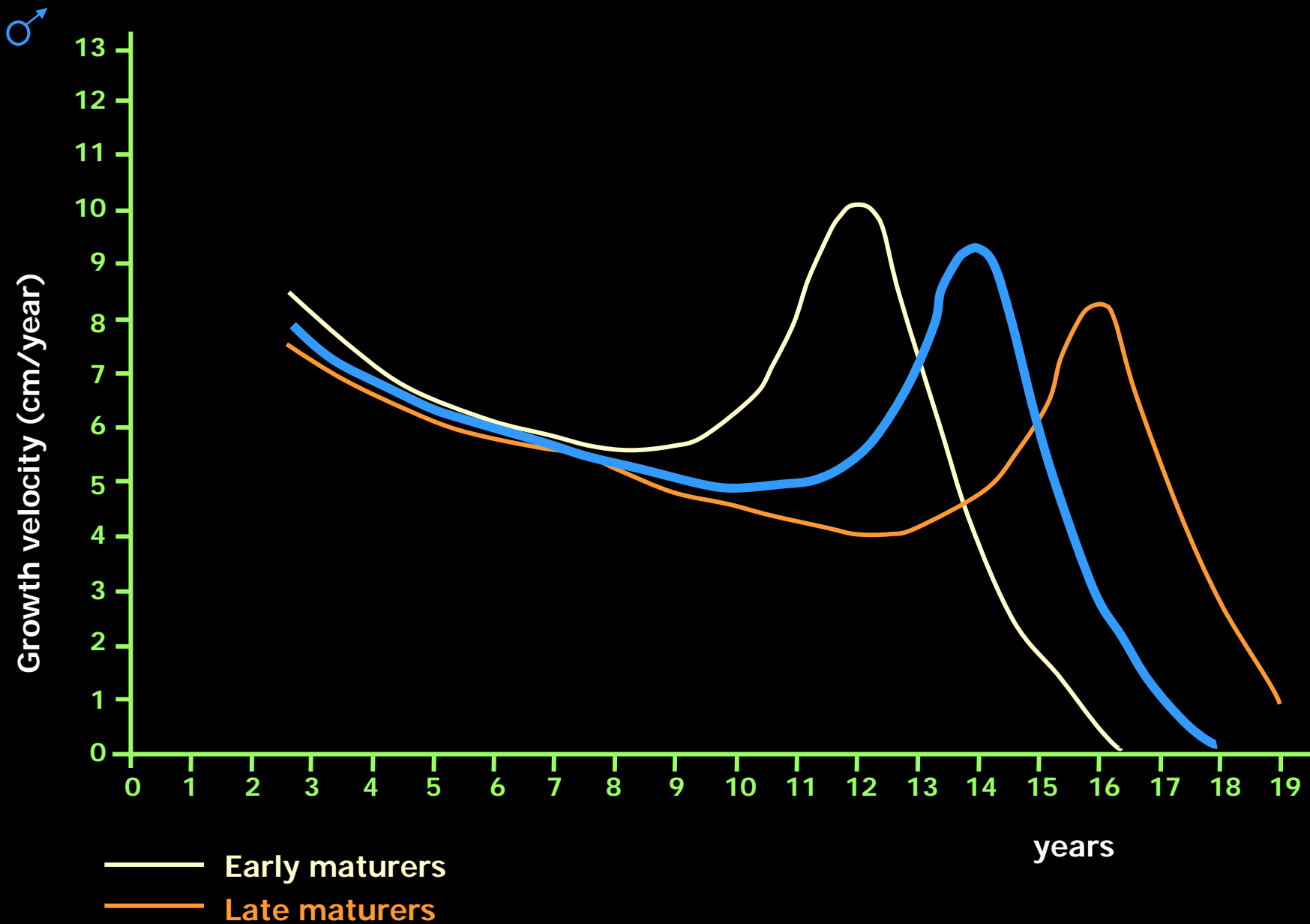
Belgium

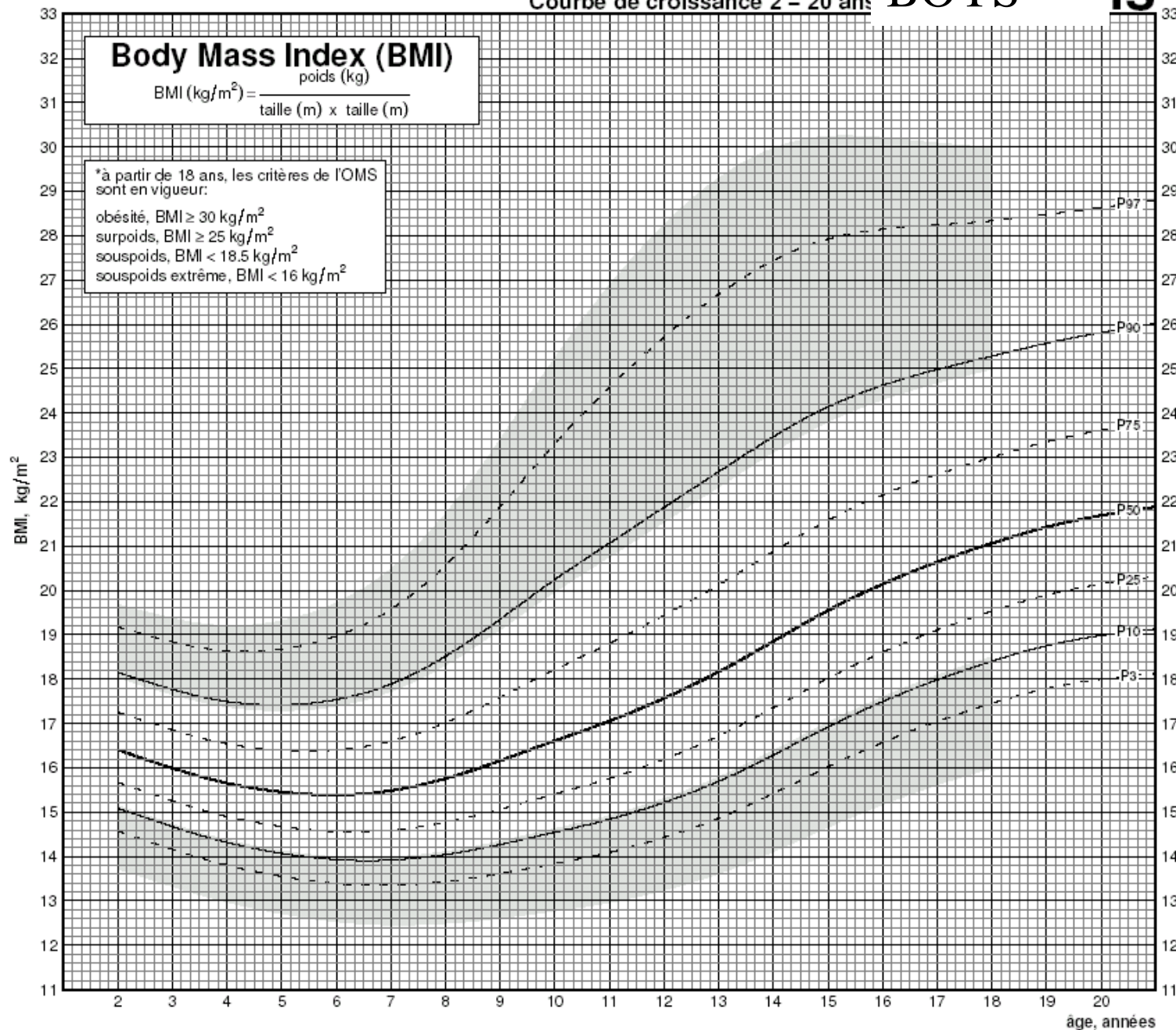


THE GROWTH SPURT

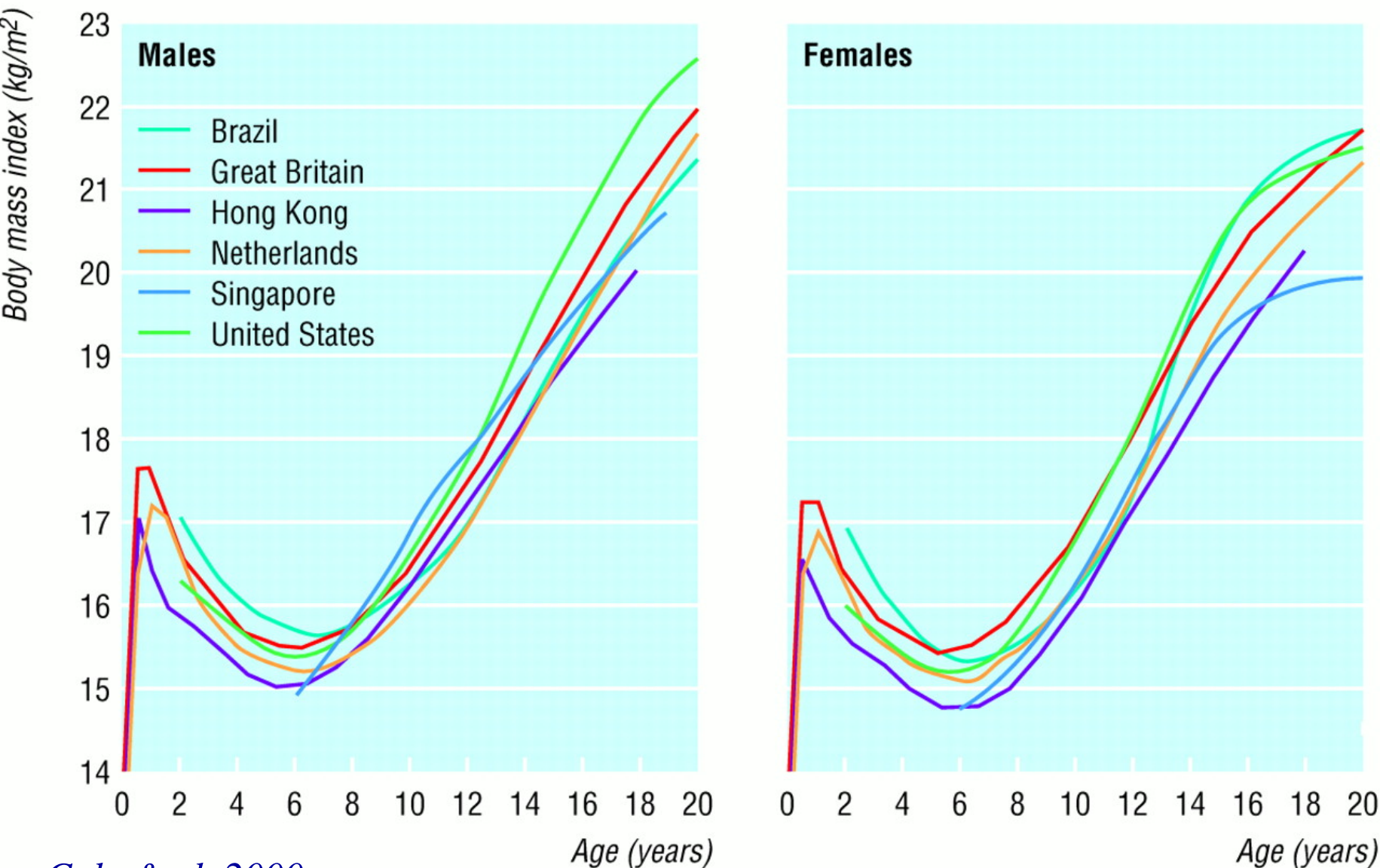




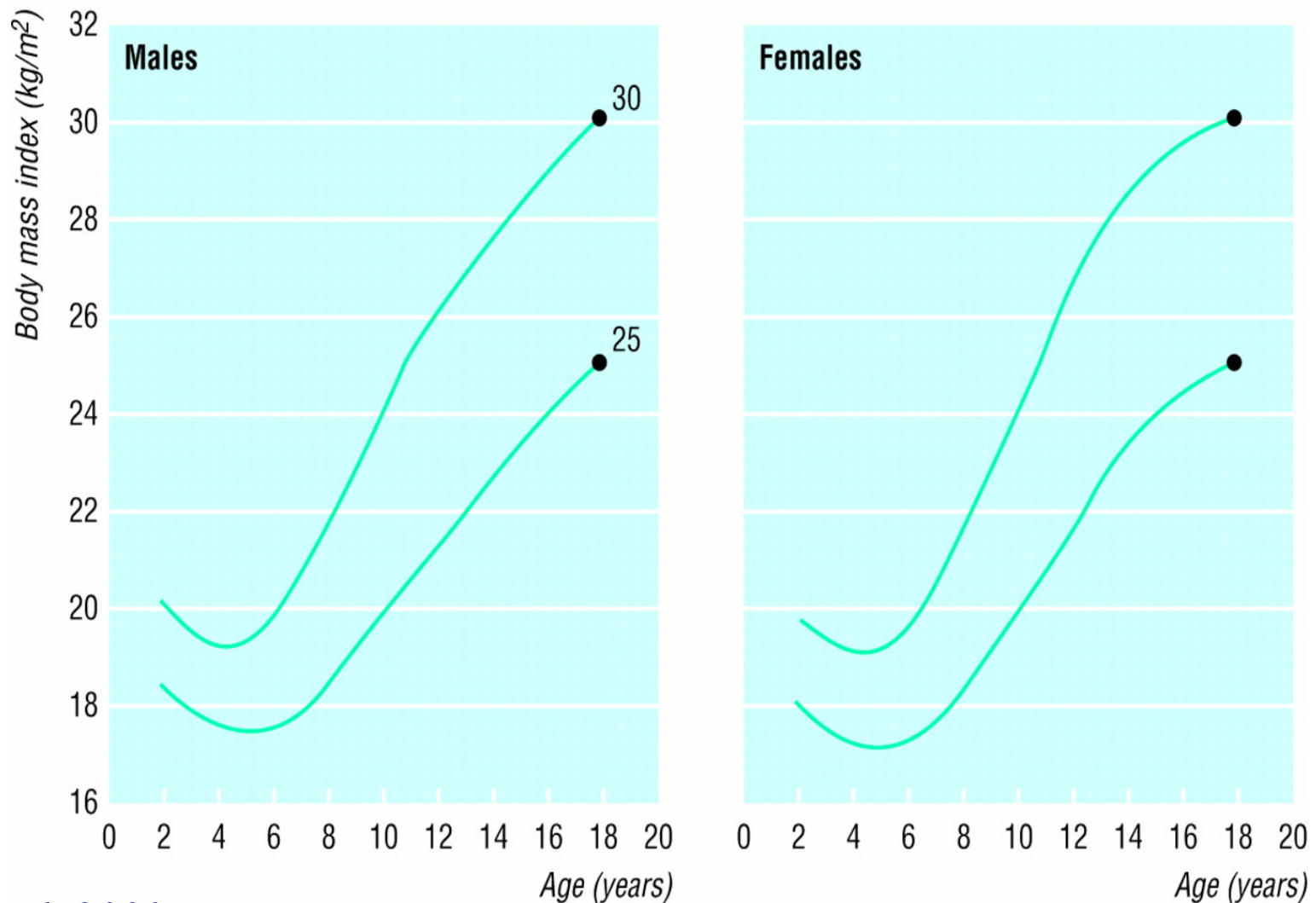




BMI AND ETHNICITY



OVERWEIGHT & OBESITY



Cole & al. 2000

While the percentage of body fat increases in females during puberty, it decreases in males.

Percentage of Body Fat during Puberty

Stage of Puberty	% Body Fat
Female	
1	15.7
2	18.9
3	21.6
4	26.7
Male	
1	14.3
2	11.2
Percentage of body fat remains unchanged in stages 3, 4, and 5.	

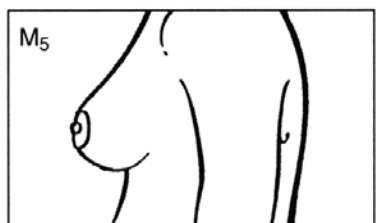
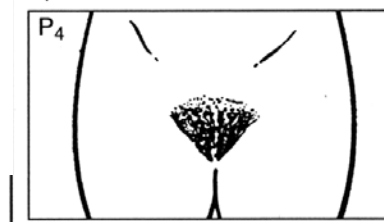
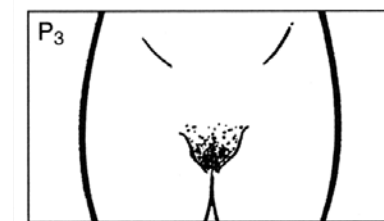
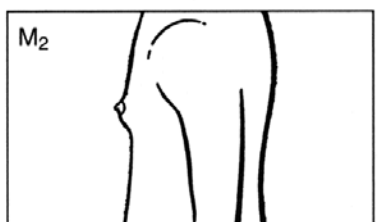
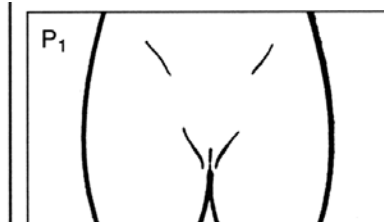
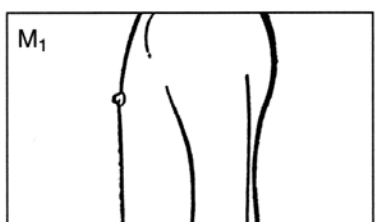
In females, the fact that the adipose mass increases at a greater rate than the lean body mass, may be misunderstood by the adolescent girl who may think to be overweight

Tanner stages

GIRLS

Breast

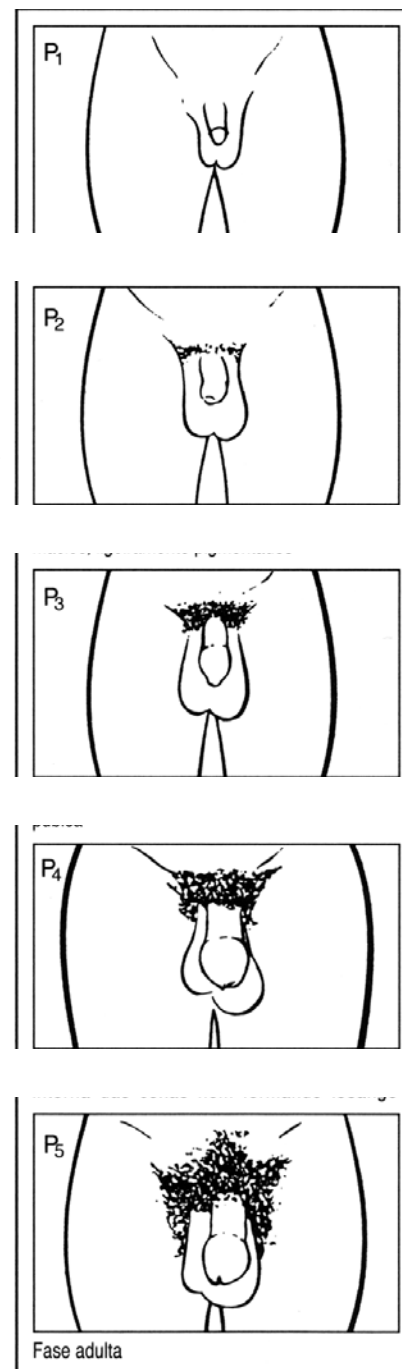
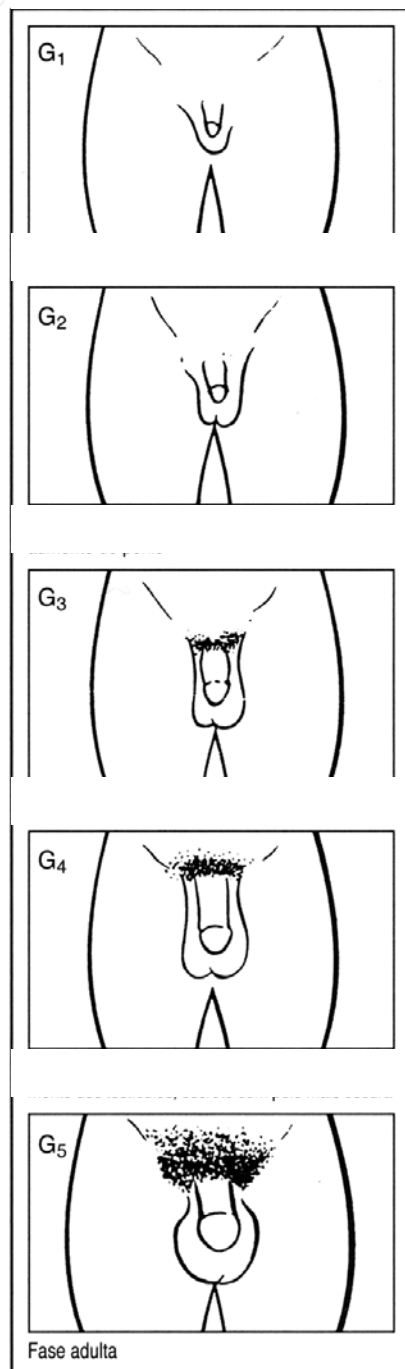
Pubic hairs



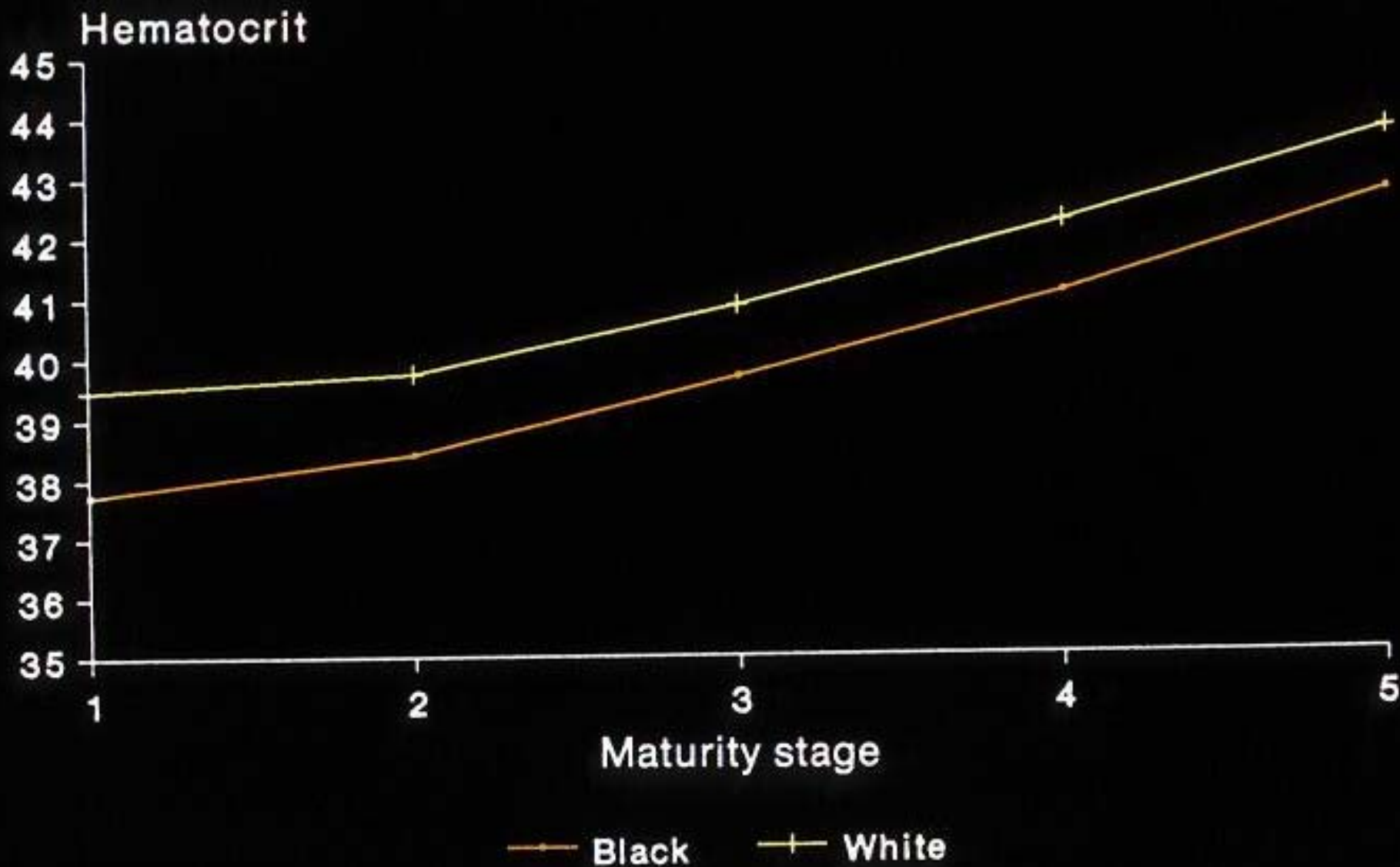
BOYS

genitals

Pubic hairs




Tanner stages are not only used for assessing level of pubertal development, peak height velocity, age of menarche, but also for interpreting many laboratory data.



Just because an adolescent has grown several cm in height, **it does not mean** that his or her thinking ability has expanded at the same rate or at the same time. On the other hand, **the tall teen is not necessarily a more mature thinker**

Identify the psychological
and social events of
adolescent development

THE IMPACT OF PUBERTY

 The « booster » of the adolescence process

 The adaptation to a new body image

 physiological clumsiness

 fatigue

 sexual arousal

 Exploratory behaviour, sensation seeking

WHAT WE KNOW: AMONG GIRLS

Early maturing adolescent girls tend to :

- Suffer from mental health problems in a higher proportion (depression)
- Have a disturbed body image in a higher proportion
- Engage earlier in sexual activities including sexual intercourse (& no. of partners)
- Engage in exploratory behaviour (i.e. substance use) in a higher proportion

WHAT WE KNOW: AMONG BOYS

- late maturing boys do suffer from mental health problems more often and have a disturbed body image in a higher proportion

HOWEVER, early maturing boys, as girls do:

- ❖ Suffer from mental health problems in a higher proportion (depression)
- ❖ Report early sexual activities a higher proportion
- ❖ Engage in exploratory behaviour & delinquent behaviour in a higher proportion

EXAMPLE: THE SMASH SURVEY

- ☞ A national survey involving 3384 girls and 4044 boys aged 16 to 20 years (*most being post-pubertal*)
- ☞ Anonymous self administered questionnaire focusing on health, lifestyles and use of services
- ☞ A comparison of early, on time and late maturers

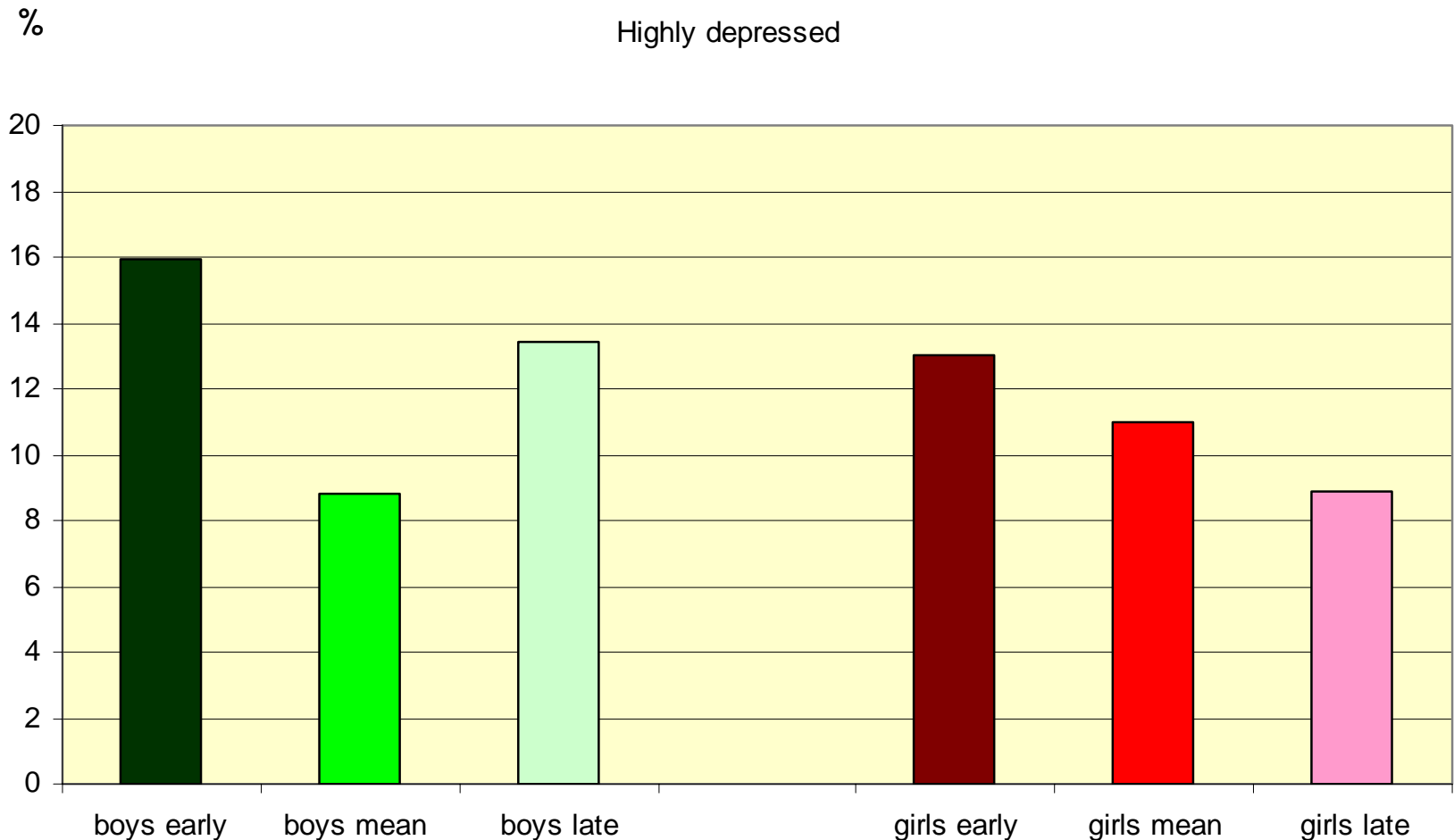
	GIRLS				BOYS		
	Early N=1054 31%	Mean N=1717 51%	Late N=597 18%		Early N=986 25%	Mean N=2373 59%	Late N=645 16%
Mean age	17.9	17.8	17.9		18.0	17.9	18.0

Percents of respondents who report to feel uneasy with their body image



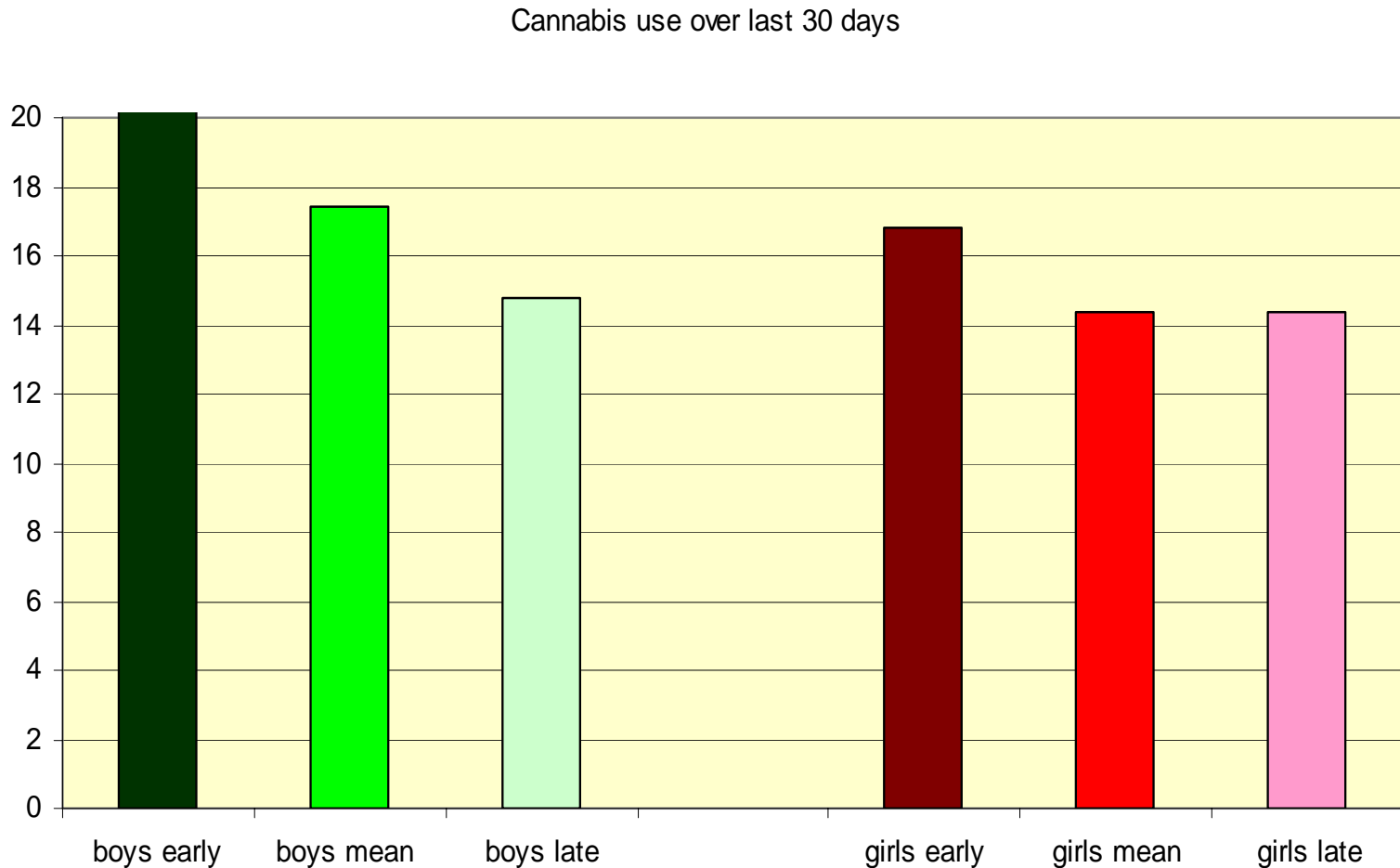
DEPRESSION

Percents of respondents who report to feel highly depressed



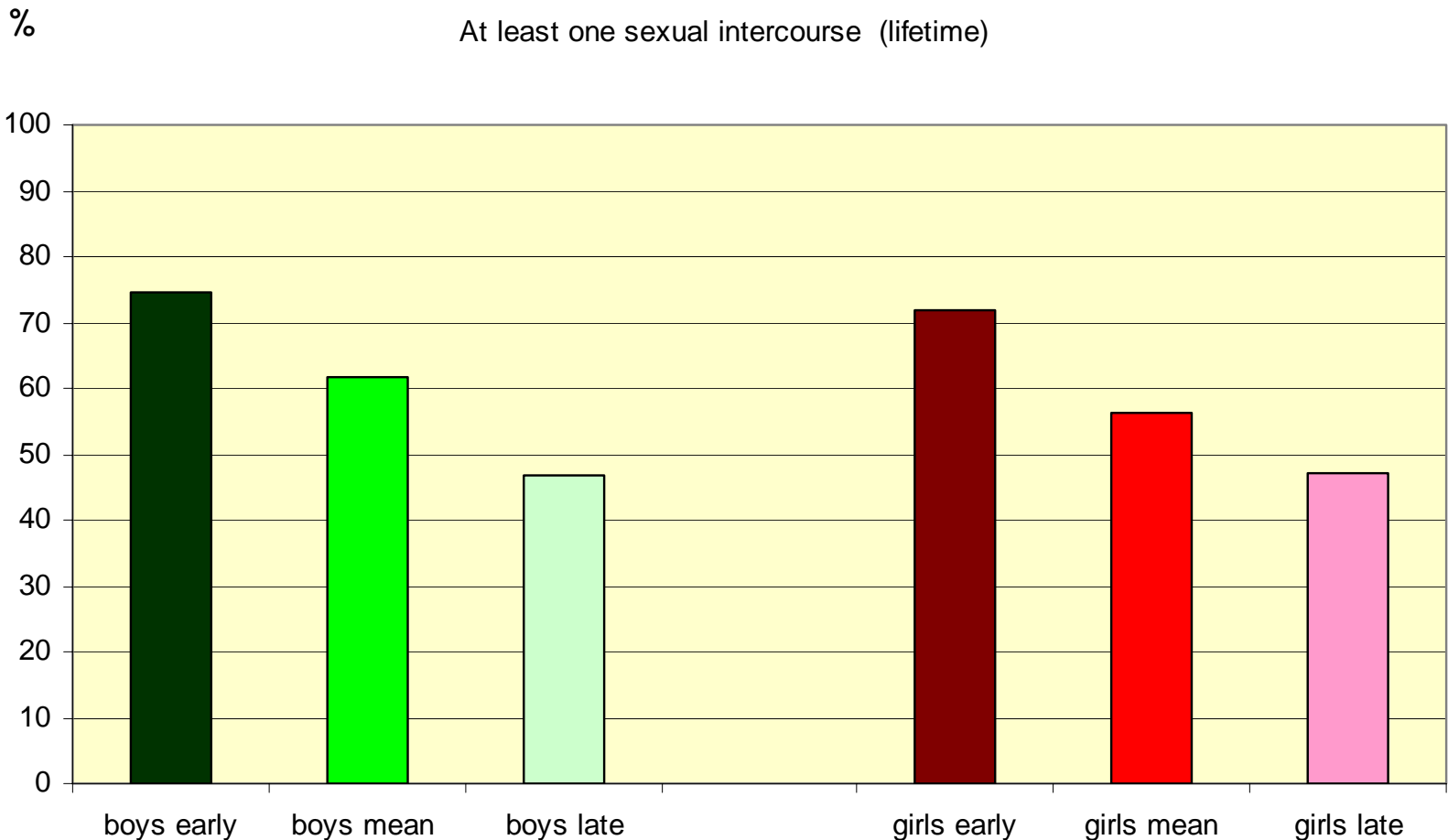
CANNABIS USE

Percents of respondents who reporting
cannabis use at least once over the last 30 days

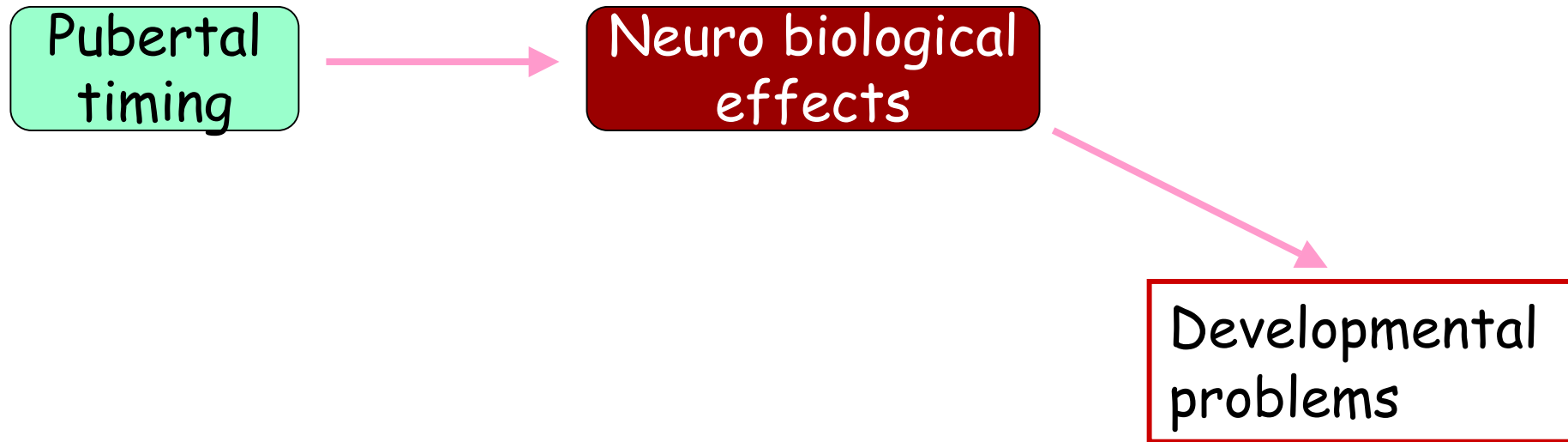


SEXUAL INTERCOURSE

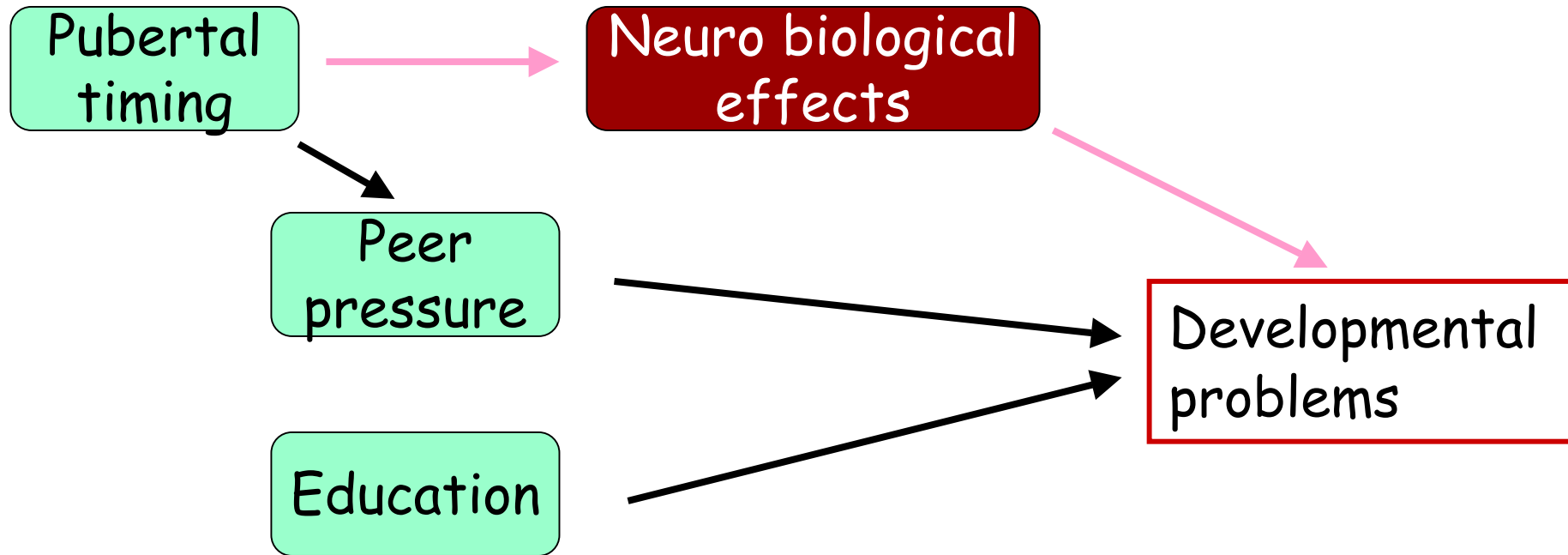
Percents of respondents who report at least one sexual intercourse in their life



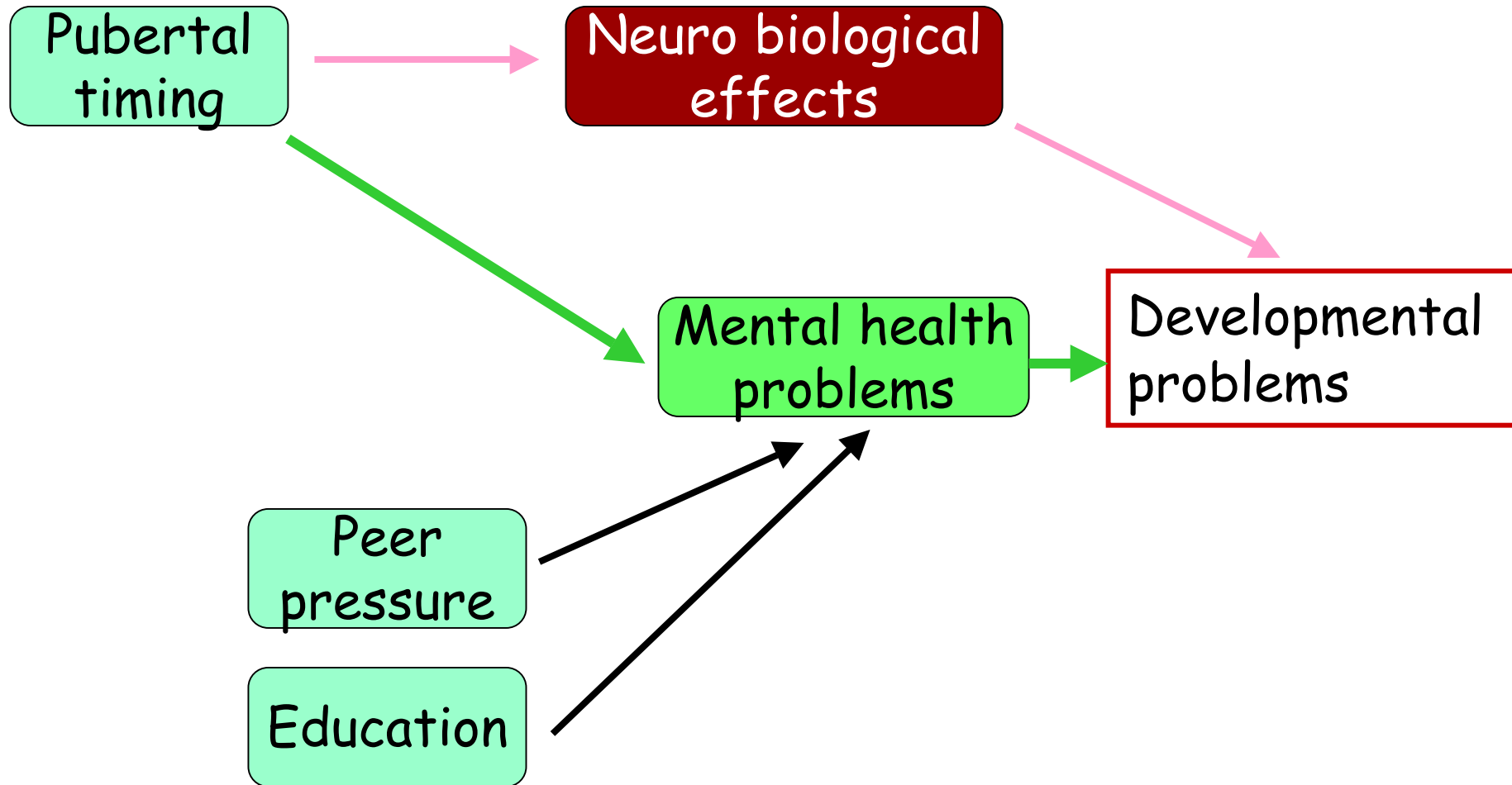
HYPOTHESES



HYPOTHESES

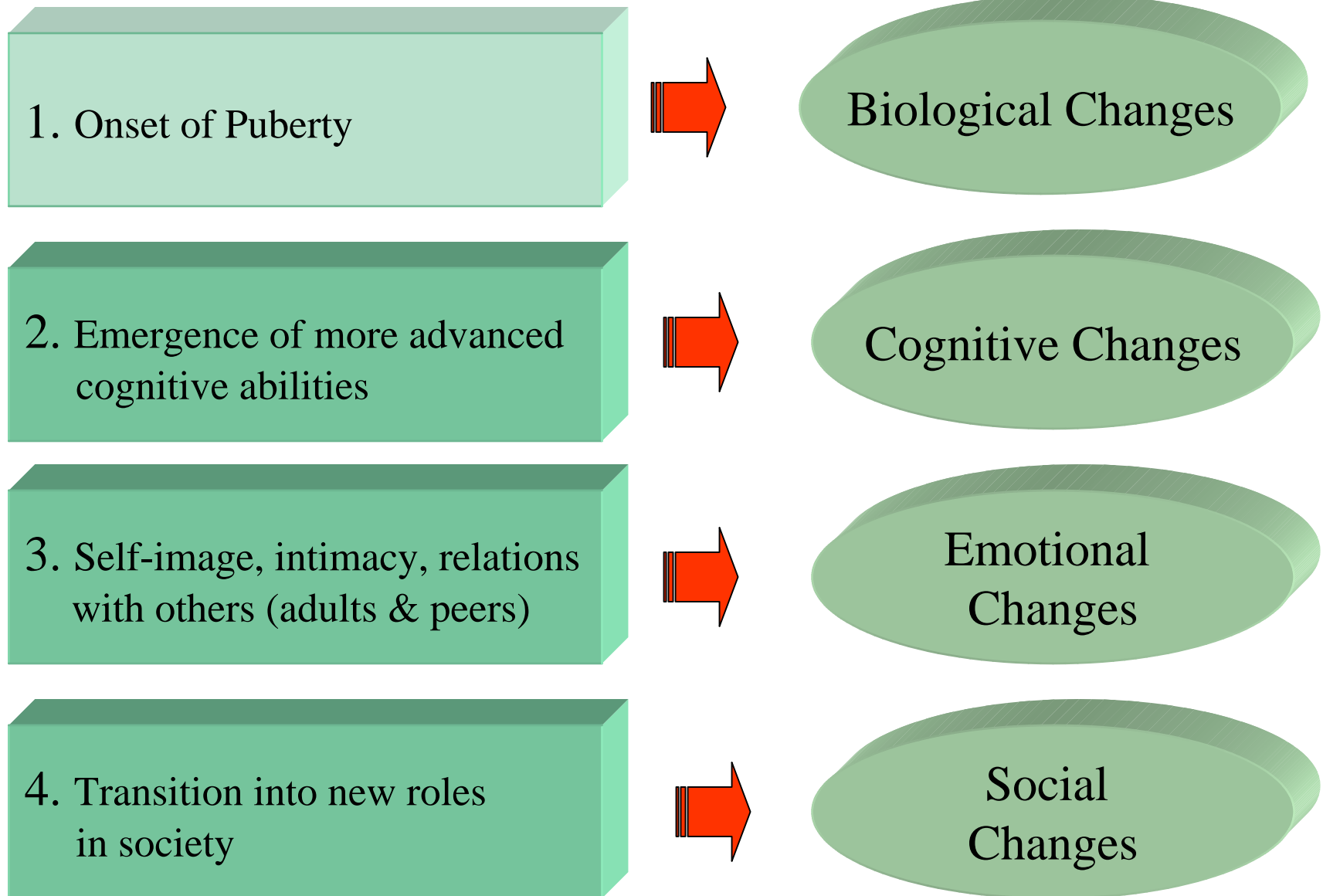


HYPOTHESES

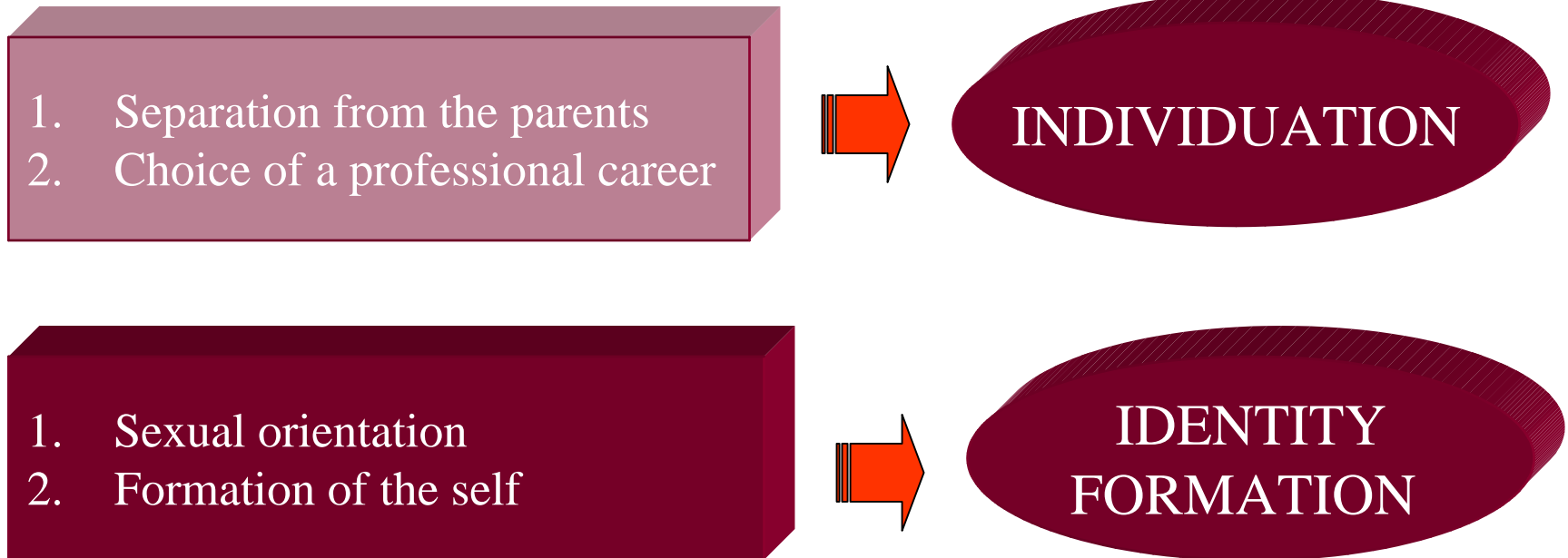


Identify the psychological
and social events of
adolescent development


Features of adolescent development that occur universally




A developmental definition of adolescence: general goals



WHAT IS ADOLESCENCE ?

 the process of *autonomisation* by which the child becomes more and more reliant on his own competences and less dependent on the opinion and support of his parents

 the *acquisition of a stable identity*, the permanent feeling that an individual has that he knows who he is, what his life should look like and to some extent how others see him

Identity is a subjective sense as well as an observable quality of personal sameness & continuity, paired with some belief in the sameness & continuity of some shared world image

THE ADOLESCENT PROCESS

early adolescence (10-13y.)

 Intellectual development *concrete, egocentric*

 Autonomisation

 self image

 Independence

 Intimacy
friends

*centered on pubertal changes
less interest in parents' activities
relationships with same-sex*

 Identity

 Sexual

 Moral

 Vocational

*increased needs for privacy
idealistic goals
lack of impulse control*

THE ADOLESCENT PROCESS

middle adolescence (13-16y.)

 Intellectual development *concrete, but more complex tasks*

 Autonomisation

 self image

 Independence

 Intimacy

*making the body attractive
peak of conflicts with parents
peak peer group activities*

 Identity

 Sexual

 Moral

 Vocational

*exploratory behaviour
first job experiences
testing of rules*

THE ADOLESCENT PROCESS

late adolescence (17-20 y.)



Intellectual development
perspective

abstract tasks, future



Autonomisation

✉ self image

✉ Independence

✉ Intimacy

acceptance of one's body

reacceptance of parent's support

more intimate relationships



Identity

✉ Sexual

✉ Moral

✉ Vocational

consolidation of sexual identity

*can set limit, ability to
compromise*

choice of vocation/profession

*What is a normal
adolescent ?*

WARNING SIGNS



Decreased school/professionnal achievement



Isolation, lack of relationship






Violence, deviant behavior



Physical/functional symptoms

THE NORMAL ADOLESCENT

-  A normal adolescent has a flexible behavior which evolves over time, and keeps creativity in at least some areas. He usually has good relationship with at least 1-2 peers
-  One does not judge normality only in terms of behaviour but must reflect on the meaning of any behaviour and the context in which it takes place
-  Some behaviours are acceptable for older adolescents but may be less acceptable at younger ages

SOME QUESTIONS



How do you tailor the following behaviour to developmental stages ?



Being drunk at age 15 ?



At what age is it acceptable to overnight outside home without notifying the parents ?



How do you tailor the following behaviour to different cultural backgrounds ?



At what age is it considered as appropriate to have sex ?

Case study

The parents tell you that their 16 year old son is withdrawn and doesn't talk to them since three weeks. The boy himself says that he doesn't feel sad and is enjoying playing his guitar and seeing his girlfriend.

Manage the delivery of
health care according to
adolescent bio-psychosocial
development


Use the following examples to reflect on the interactions between various types of behaviours and developmental tasks

develop/provide messages and answers which are appropriate for their stage of development

Situations

1. A 14 year-old boy binge drinks every weekend with his friends.
2. A 16 year-old girl is having unprotected sex; she is sure she cannot become pregnant because her menses are irregular.
3. A 12 year-old boy rides a cycle without a protective helmet
4. A 19 year old girl asks for a 100% safe contraception because she previously experienced an abortion
5. A 16 year-old boy who takes dubious body building substances (or he has access to steroids!) because his ice hockey coach told him to "get bigger and stronger fast".
6. A 14 year-old who wants a physician's certificate that she/he can work after school for a local store loading and unloading (heavy) merchandise.

CRITERIA

 Duration of the symptoms

 > 3 months

 Stability of symptoms (symptoms which don't evolve over time)

 Symptoms which heavily impact on the adolescent's daily life (family environment)

The developmental grid

Development	Early Adolescence	Mid Adolescence	Late Adolescence
Biological			
Psychological			
Social			

WRAP UP - EVALUATION

1. What have you liked and what have you learned?
2. Is there something you would have wanted more?
3. What do you still need?
4. How can we improve this session?