



## Correction to: A Cost Analysis of School-Based Lifestyle Interventions

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In the article, ‘A Cost Analysis of School-Based Lifestyle Interventions’, we calculated the societal costs of two school-based lifestyle interventions: ‘the Healthy Primary School of the Future’ and ‘the Physical Activity School’. Unfortunately, it became clear to us that the cost calculation for the Physical Activity Schools was not entirely correct.

It was stated that the length of the school day was extended at Healthy Primary Schools of the Future and at Physical Activity Schools to facilitate the implementation of activities. The length of the school day was valued in the cost calculations as it might result in increased productivity of primary caregivers (e.g. more possibilities for work). However, at Physical Activity Schools the length school day did not become longer in comparison to control schools.

As a sensitivity analysis we excluded the value of the extended school day. This was done as the value of this cost item is highly uncertain (e.g. gains in productivity of primary caregivers could be offset by potential utility losses). The results of this sensitivity analysis are therefore now representative of the updated base-case results for the Physical Activity Schools. Table 2 represents the costs of HPSF and PAS for the first year of implementation. When excluding the value of the extended school day for PAS, the costs amounted to €505 per child per year or €3.16 per child per day. In the hypothetical steady state, the costs were €346 per child per year or €2.16 per child per day (Table 3).

In the article, we concluded that the costs for the education sector were fully compensated for the Physical Activity School and almost fully compensated for the Healthy Primary School of the Future by the savings within the household sector. Based on the updated calculations, we conclude that a small investment is required for the delivery of the Physical Activity School (€2.16 per child per day for the Physical Activity School and €0.96 for the Healthy Primary School of the Future).

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**Table 2** Per child costs of HPSF and PAS for the first year after implementation

Cost items for the first year after implementation	Time investment	Volume (per school)	Unit price	Stakeholder perspective														
				Education		Household & leisure		Labour & social security		Healthcare		Societal perspective						
				HPSF	PAS	HPSF	PAS	HPSF	PAS	HPSF	PAS	HPSF	PAS					
<b>Personnel</b>																		
Program coordinator	Coordination	4 schools: 1 FTE	€112,000 / FTE <sup>1</sup>	€84														
School project leaders	Coordination	HPSF: 0.5 FTE; PAS: 0.4 FTE	€65,000 / FTE <sup>1</sup>	€97														
Volunteers	Assisting during lunch break and activities		Financial compensation: HPSF: €12,645 <sup>1</sup> PAS: €8145 <sup>1</sup>	€38	€24	€53 <sup>A</sup>	€17 <sup>A</sup>											
		Time investment	Time investment															
		HPSF: 12 volunteers, 1 h/day, 4 days/week (upper grades 5 days/week), 40 weeks	€14 / hour <sup>4</sup>															
		PAS: 7 volunteers, 1 h/day, 3 days/week (upper grades 4 days/week), 40 weeks																
Primary caregivers	Per child fee for supervision during lunch break	4 times / week, 40 weeks	€1 / day not charged to carers <sup>1</sup>	€160	€160	€-160	€-160											
	Parental evaluation committee	5 times / year, 1 h, 10 persons	€14/h <sup>4</sup>															
	Value of the extended school hours	0.5 h freed-up, 4 times / week	€14 / hour <sup>4</sup>															
	Preparing lunches as part of reintegration to the labour market	2 children / household																
	Giving workshops	1 person, 15 h/week	NA <sup>E</sup>															
External parties from the leisure sector				€20	€20	€0 <sup>B</sup>	€0 <sup>B</sup>											
Cross-discipline coordinators from the local government	Organizing activities	1 FTE / 4 schools	€50,000 / FTE <sup>1</sup>	€37	€37	€0 <sup>C</sup>	€0 <sup>C</sup>											
Pedagogical staff from childcare partners	Guiding lunch break and activities	HPSF: 12 persons, 2 h/day, 4 days/week (upper grades 5 days/week), 40 weeks PAS: 8 persons, 1.5 h/day, 3 days/week (upper grades 4 days/week), 40 weeks	€65,000/ FTE <sup>1</sup>	€524	€204	€0 <sup>D</sup>	€0 <sup>D</sup>											
<b>Materials</b>																		
Transport				€21	€21													
Accommodations		1 h, 4 days/week	€7097 <sup>3</sup>	€8	€8													
Food (including personnel from caterer)		HPSF: 4 times / week, 40 weeks	Cost: €2.46 / child / day <sup>3</sup> Offset: €-1.86 / day <sup>5</sup>	€394 <sup>F</sup>		€-298 <sup>F</sup>												
Curriculum materials		1 set per year	€2500 / school <sup>1</sup>	€7	€7													
Monitoring equipment		1 survey	€1200 / survey <sup>1</sup>	€4	€4													



**Table 3** Per child costs of HPSF and PAS for a hypothetical steady state

Cost items for the steady state	Activities	Volume (per school)	Unit price	Stakeholder perspective									
				Education		Household & leisure		Labour & social security		Healthcare		Societal perspective	
				HPSF	PAS	HPSF	PAS	HPSF	PAS	HPSF	PAS	HPSF	PAS
<b>Personnel</b>													
Program coordinator	Coordination	4 schools: 0.25 FTE <sup>A</sup>	€112,000 / FTE <sup>1</sup>	€21	€21								
School project leaders	Coordination	0.25 FTE <sup>A</sup>	€65,000 / FTE <sup>1</sup>	€49	€49								
Volunteers	Assisting during lunch break and activities	Time investment HPSF: 12 volunteers, 1 h/day, 4 days/week (upper grades) PAS: 7 volunteers, 1 h/day, 3 days/week (upper grades) 4 days/week, 40 weeks	Financial compensation: HPSF: €12,645 <sup>1</sup> ; PAS: €8145 <sup>1</sup>	€38	€24	€53 <sup>B</sup>	€17 <sup>B</sup>						
Primary caregivers	Parental evaluation committee	5 times / year, 1 h, 10 persons	€14 / h <sup>4</sup>	€2	€2								
Beneficiaries of unemployment benefits	Value of the extended school hours	0.5 h freed-up, 4 times / week	€14 / hour <sup>4</sup>	€-562									
External parties from the leisure sector	Preparing lunches as part of reintegration to the labour market	1 person, 15 h/week	Income level: €1525 / month <sup>6</sup> , Unemployment benefits: €1320 / month <sup>7</sup> ; €8.80 / hour <sup>6</sup>	€-3 <sup>C</sup>	€0	€-22 <sup>C</sup>	€0						
Pedagogical staff from childcare partners	Giving workshops		Income taxes: 36.55% <sup>8</sup>	€20	€20	€0 <sup>D</sup>	€0 <sup>D</sup>			€0 <sup>E</sup>	€0 <sup>E</sup>		
	Guiding lunch break and activities	HPSF: 12 persons, 2 h/day, 4 days/week (upper grades) PAS: 8 persons, 1.5 h/day, 3 days/week (upper grades) 4 days/week, 40 weeks	€65,000/ FTE <sup>1</sup>	€524	€204								
<b>Materials</b>													
Food (including personnel from caterer)		HPSF: 4 times / week, 40 weeks	Cost: €2 / child / day <sup>A</sup>	€320 <sup>F</sup>	€0	€-298 <sup>F</sup>	€0						
Curriculum materials		1 set per year	Offset: €1.86 / day <sup>3</sup>	€7	€7								
Monitoring equipment		1 survey	€2500 / school <sup>1</sup>	€4	€4								
Total costs			€1200 / survey <sup>1</sup>										

**Table 3** (continued)

Cost items for the steady state	Activities	Volume (per school)	Unit price	Stakeholder perspective									
				Education		Household & leisure		Labour & social security		Healthcare		Societal perspective	
				HPSF	PAS	HPSF	PAS	HPSF	PAS	HPSF	PAS	HPSF	PAS
Net costs (per child/year)				€982	€328	€-807	€18	€-22	€0	€0	€0	€153	€346
Personnel				€651	€317	€-510	€18	€-22	€0	€0	€0	€120	€335
Materials				€331	€11	€-298	€0	€0	€0	€0	€0	€33	€11
Net costs (per child/day)				€6.14	€2.05	€-5.05	€0.11	€-0.13	€0.00	€0.00	€0.00	€0.96	€2.16

HPSF = Healthy Primary School of the Future; PAS = Physical Activity School; FTE = full-time equivalent.

Discrepancies between the sum of cost items may be due to rounding.

<sup>1</sup> Budget 'the Healthy Primary School of the Future'

<sup>2</sup> Productivity costs of paid labour (Zorginstituut Nederland 2015)

<sup>3</sup> Accounting data 'the Healthy Primary School of the Future'

<sup>4</sup> Productivity costs of unpaid labour (Zorginstituut Nederland 2015)

<sup>5</sup> Household expenses on children's lunches (NIBUD 2017)

<sup>6</sup> Minimum wage ("Minimumloon 2016")

<sup>7</sup> Unemployment benefits (Rijksoverheid 2016)

<sup>8</sup> Income tax (Belastingdienst 2016)

A Steady state assumption

B Value of time investment minus financial compensation

C Household: income level minus unemployment benefits; social security: savings from unemployment benefits and earnings from income taxes

D-E Financial contributions fully compensated the time investments

F Food costs are a positive cost to the education sector and a negative cost to the household sector