

Innovative Education towards Sustainable Food Systems

# A personal approach to sustainable diets

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### Outline

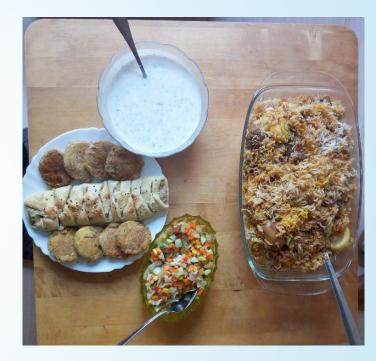
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### Introduction

- Name: Biryani
- Origin: Indian subcontinent<sup>1</sup>
- Ingredients: Rice, Meat, vegetables and spices
- Varieties: Sindhi biryani,
   Hyderabadi biryani, Bombay
   biryani, Navratan biryani
- Served: with Raita, chutney and salad
- Cultural context: famous and prepared on special occasions









# Ingredients











# Recipe



1. Marinate the chicken



2. Fry the onion



3. Till it turns brown



4. Add chicken and fry it



5. Add tomato and cook it



6. Boil the rice



7. Layer them



8. Steam for 10 min



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### Sustainability aspects

- Rice crop causes the greatest emissions of GHG<sup>1</sup>
- Rapeseed oil have less of an impact on the environment than palm oil<sup>1</sup>

# Water needed for food produce (Litre per kilogram)<sup>2</sup>

Chicken meat	4325
Rice	3000
Oil crops	2364
Vegetables	322

#### 1. Livsmedelsverket (2015)

2. Mekonnen and Hoekstra (2010)

#### **Amount of waste**

Food waste



Before cooking 180g

Left over 150g

Packaging material





Plastic 5g

Carboard1g

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## Health aspects

### Vegetable red Eccels chropiski tiofrobesity,

Ingredients	Cardic Energy Kcal	Vascu Protein g	g	isease and g	Can Fibre g	Cers <sup>1</sup> Calcium mg	Phosphorus mg	lron mg
Chicken	Ri <u>çş</u> ir	(creas	es <sub>2</sub> th	e risk of pu	tting	węigh	t <sup>1</sup> <sub>233.75</sub>	2.375
Rice	450	8.375	1.125	99.375	0.5	22.5	160	1.875
Oil	Chiroke	en pro	VIOES	a lot of irc	n an	d prot	ein <sup>10</sup>	0
Yogurt	35.5	1.75	0.6	2.65	0	83	71	0.2
Tomato	15.75	0.825	0.15	3.075	0.375	10.5	20.25	0.525
Onion	44	1.4	0.2	9.8	0.7	29	47	0.7
Garlic	16.94	0.518	0.042	3.598	0.112	3.64	17.08	0.196
Ginger	7.42	0.238	0.098	1.582	0.238	2.38	8.26	0.238
Lemon	0.75	0.0175	0.0175	0.2125	0.0175	0.9	0.475	0.01
Chillies	0.7	0.036	0.006	0.186	0.042	0.26	0.56	0.012
Total	1248.31	36.65	74.18	120.47	1.9845	170.93	558.375	6.131



<sup>2.</sup> Food composition table for Pakistan(2001)

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# Improvement Strategies

- Portion size is reduced
- Cooking method is altered
- Chicken can be replaced with fish
- Eco-friendly products are used









### Conclusion

- Made me curious about transparency of products
- Broadened my view about the environmental impact of food production and consumption
- Made me more careful and responsible towards sustainability
  - I strongly feel, small steps at individual level can definitely help to achieve the UN sustainability goals of reducing future economic, environmental and social costs and also helps to reduce poverty<sup>1</sup>



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# Thank you



