

SLEEP HEALTH AND LIFESTYLE DATASET

The Role of Rest in Physical and Mental Well-being

Average Sleep Duration

```
select count(Person_ID) as Employee,avg(sleep_duration) as  
Avg_Sleep_Duration from Sleepandlifestyle;
```

	Employee	Avg_Sleep_Duration	
1	374	7.132085	

Sleep Quality Index by Age Group

```
SELECT
CASE
    WHEN Age BETWEEN 20 AND 29 THEN '20-29'
    WHEN Age BETWEEN 30 AND 39 THEN '30-39'
    WHEN Age BETWEEN 40 AND 49 THEN '40-49'
    WHEN Age BETWEEN 50 AND 59 THEN '50-59'
    ELSE '60+'
END AS Age_Group,count(*)as Employee,
AVG([Quality_of_Sleep]) AS Sleep_Quality_Index
FROM Sleepandlifestyle
GROUP BY
CASE
    WHEN Age BETWEEN 20 AND 29 THEN '20-29'
    WHEN Age BETWEEN 30 AND 39 THEN '30-39'
    WHEN Age BETWEEN 40 AND 49 THEN '40-49'
    WHEN Age BETWEEN 50 AND 59 THEN '50-59'
    ELSE '60+'
END;
```

	Age_Group	Employee	Sleep_Quality_Index
1	20-29	19	5
2	30-39	142	7
3	40-49	117	6
4	50-59	96	8

Occupation wise Average Physical Activity Level

```
SELECT Occupation,count(*)as Employee,AVG([Physical_Activity_Level]) AS Avg_Physical_Activity  
FROM Sleepandlifestyle group by Occupation order by Employee,Avg_Physical_Activity;
```

	Occupation	Employee	Avg_Physical_Activity
1	Manager	1	55
2	Sales Representative	2	30
3	Scientist	4	41
4	Software Engineer	4	48
5	Salesperson	32	45
6	Accountant	37	58
7	Teacher	40	45
8	Lawyer	47	70
9	Engineer	63	51
10	Doctor	71	55
11	Nurse	73	78

Occupation wise Stress Level

```
SELECT Occupation,count(*)as Employee,AVG([Stress_Level]) AS Avg_Stress_level  
FROM Sleepandlifestyle group by Occupation order by Employee,Avg_Stress_level ;
```

	Occupation	Employee	Avg_Stress_level
1	Manager	1	5
2	Sales Representative	2	8
3	Software Engineer	4	6
4	Scientist	4	7
5	Salesperson	32	7
6	Accountant	37	4
7	Teacher	40	4
8	Lawyer	47	5
9	Engineer	63	3
10	Doctor	71	6
11	Nurse	73	5

Gender and Occupation Wise Average Daily Steps

```
SELECT Gender,Occupation,count(*)as Employee,AVG([Daily_Steps]) AS Avg_Daily_Step  
FROM Sleepandlifestyle group by Gender,occupation order by Employee,Avg_Daily_Step;
```

	Gender	Occupation	Employee	Avg_Daily_Step
1	Female	Manager	1	5500
2	Male	Accountant	1	7000
3	Male	Sales Representative	2	3000
4	Female	Lawyer	2	4400
5	Female	Doctor	2	10000
6	Female	Scientist	4	5350
7	Male	Software Engineer	4	5800
8	Male	Teacher	5	4860
9	Male	Engineer	31	6993
10	Female	Engineer	32	5000
11	Male	Salesperson	32	6000
12	Female	Teacher	35	6114
13	Female	Accountant	36	6877
14	Male	Lawyer	45	7806
15	Male	Doctor	69	6715
16	Female	Nurse	73	8057

Occupation Wise Heart Rate Range Min-Max resting heart rate

```
SELECT Occupation, count(person_id) as Employee,  
       MIN([Heart_Rate]) AS MinHeartRate,  
       MAX([Heart_Rate]) AS MaxHeartRate  
  FROM Sleepandlifestyle  
 GROUP BY Occupation order by  
 Employee,MinHeartRate,MaxHeartRate ;
```

	Occupation	Employee	MinHeartRate	MaxHeartRate
1	Manager	1	75	75
2	Sales Representative	2	85	85
3	Software Engineer	4	70	85
4	Scientist	4	76	81
5	Salesperson	32	72	72
6	Accountant	37	67	73
7	Teacher	40	65	82
8	Lawyer	47	68	84
9	Engineer	63	65	80
10	Doctor	71	65	86
11	Nurse	73	68	80

Occupation wise Blood Pressure Risk Count Number of individuals with BP \geq 140/90

```
SELECT Occupation, COUNT(*) AS HypertensionRiskCount  
      FROM Sleepandlifestyle  
     WHERE CAST(SUBSTRING([Blood_Pressure], 1, CHARINDEX('/', [Blood_Pressure]) - 1) AS INT) >= 140  
OR CAST(SUBSTRING([Blood_Pressure], CHARINDEX('/', [Blood_Pressure]) + 1, LEN([Blood_Pressure])) AS INT) >= 90  
GROUP BY Occupation  
ORDER BY HypertensionRiskCount DESC;
```

	Occupation	HypertensionRiskCount
1	Nurse	65
2	Teacher	28
3	Doctor	4
4	Sales Representative	2
5	Software Engineer	1

Sleep Disorder Prevalence % of individuals diagnosed with Sleep Apnea or Insomnia

```
SELECT  
(COUNT(*) * 100.0 / (SELECT COUNT(*) FROM Sleepandlifestyle)) AS SleepDisorderPrevalence  
FROM Sleepandlifestyle  
WHERE [Sleep_Disorder] IN ('Sleep Apnea', 'Insomnia');
```

	SleepDisorderPrevalence
1	41.443850267379

Occupation wise BMI Category Distribution Count or % of individuals in Normal, Overweight, Obese categories

```
SELECT Occupation, [BMI_Category], COUNT(*) AS  
    CountIndividuals  
FROM Sleepandlifestyle  
GROUP BY Occupation, [BMI_Category]  
ORDER BY Occupation, CountIndividuals desc;
```

	Occupation	BMI_Category	CountIndividuals
1	Accountant	Normal	26
2	Accountant	Overweight	6
3	Accountant	Normal Weight	5
4	Doctor	Normal	65
5	Doctor	Obese	4
6	Doctor	Normal Weight	2
7	Engineer	Normal	56
8	Engineer	Normal Weight	4
9	Engineer	Overweight	3
10	Lawyer	Normal	42
11	Lawyer	Overweight	2
12	Lawyer	Obese	2
13	Lawyer	Normal Weight	1
14	Manager	Overweight	1
15	Nurse	Overweight	66
16	Nurse	Normal Weight	7
17	Sales Representative	Obese	2
18	Salesperson	Overweight	32
19	Scientist	Overweight	4
20	Software Engineer	Normal Weight	2
21	Software Engineer	Overweight	1
22	Software Engineer	Obese	1
23	Teacher	Overweight	33
24	Teacher	Normal	6
25	Teacher	Obese	1

Occupation-wise Sleep Quality Average sleep quality by occupation

```
SELECT Occupation,count(*) as Employee ,AVG([Quality_of_Sleep]) AS Avg_Sleep_Quality  
FROM Sleepandlifestyle  
GROUP BY Occupation  
ORDER BY Employee,Avg_Sleep_Quality DESC;
```

	Occupation	Employee	Avg_Sleep_Quality
1	Manager	1	7
2	Sales Representative	2	4
3	Software Engineer	4	6
4	Scientist	4	5
5	Salesperson	32	6
6	Accountant	37	7
7	Teacher	40	6
8	Lawyer	47	7
9	Engineer	63	8
10	Doctor	71	6
11	Nurse	73	7

Summary :- Sleep Health And Lifestyle Dataset

To analyze lifestyle factors (sleep, activity, stress, BMI, disorders) using SQL queries and derive health-related Queries that highlight patterns across demographics and occupations